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## Ordering Code

■ Molding Inductors / Coating Inductors

**S \* \* 2520 2R2 M P S A**

### PRODUCT CODE

- SPM : Molding Inductor
- SIM : Insert Cylinder Molding Inductor
- SAM : Molding Inductor(Auto Motive)
- AIM : Insert Cylinder Molding Inductor (Auto Motive)
- ACM : Double Molding Inductor(Auto Motive)
- SPS : Coating Inductor(Superior Electric Property)
- SPN : Coating Inductor(Normal)

### DIMENSION (L X W) (mm)

Code	Dimension	Code	Dimension
2012	2.0 X 1.2	5050	5.0 X 5.0
2016	2.0 X 1.6	6060	6.0 X 6.0
2020	2.0 X 2.0	7070	7.0 X 7.0
2424	2.4 X 2.4	8080	8.0 X 8.0
2520	2.5 X 2.0	1010	10.0 X 10.0
3030	3.0 X 3.0	1313	13.9 X 12.8
4040	4.0 X 4.0	1717	17.0 X 17.0
		2222	22.0 X 22.0

### INDUCTOR VALUE

Code	R10	1R0	100	101	102
Impedance	0.1 uH	1.0 uH	10 uH	100 uH	1000 uH

### TOLERANCE CODE

M : ±20% N : ±30%

### PACKAGING CODE

P : Embossed Reel (7")  
E : Embossed Reel (13")

### SPECIFICATION CODE

- B : GHz Band
- C : High Loading Current for Isat =20%
- H : High Current with vertical mark
- K : Standard with vertical mark-2
- L : Light Loading Current
- P : High Loading Current for Isat =30%
- S : Standard
- T : Specific Spec.
- W : Standard + Variation Terminal

### THICKNESS CODE (mm)

Code	Thick	Code	Thick	Code	Thick	Code	Thick
.	--	<b>9</b>	0.9	<b>I</b>	2.4	<b>R</b>	6.0
<b>1</b>	0.1	<b>A</b>	1.0	<b>J</b>	2.5	<b>S</b>	6.5
<b>2</b>	0.2	<b>B</b>	1.1	<b>K</b>	2.8	<b>T</b>	2.6
<b>3</b>	0.3	<b>C</b>	1.2	<b>L</b>	3.0	<b>U</b>	7.0
<b>4</b>	0.4	<b>D</b>	1.4	<b>M</b>	3.5	<b>V</b>	9.0
<b>5</b>	0.5	<b>E</b>	1.5	<b>N</b>	4.0	<b>W</b>	5.5
<b>6</b>	0.6	<b>F</b>	1.6	<b>O</b>	10.0	<b>X</b>	13
<b>7</b>	0.7	<b>G</b>	1.8	<b>P</b>	4.5	<b>Y</b>	8.0
<b>8</b>	0.8	<b>H</b>	2.0	<b>Q</b>	5.0	<b>Z</b>	3.2

## Multi-Layer Power Inductors

**IP 2012 1R0 M P S 9**

### PRODUCT CODE

IP : Multilayer Power Inductor (Lead Free)

### DIMENSION (L X W) (mm)

Code	Dimension	EIA
1608	1.6 x 0.80	0603
2012	2.0 X 1.25	0805
2016	2.0 X 1.60	0806
2520	2.5 X 2.00	1008

### INDUCTANCE CODE

Code	R47	1R0	1R5	2R2	3R3	4R7
Inductance	0.47 uH	1.0 uH	1.5 uH	2.2 uH	3.3 uH	4.7 uH

### TOLERANCE CODE

M :  $\pm 20\%$

### PACKAGING CODE

T : Paper tape reel

P : Plastic Tape

### SPECIFICATION CODE

S : Standard for DC/DC converter

L : Light loading current for choke

C : High Current Type

### THICKNESS CODE (mm)

6 : 0.65

8 : 0.8

9 : 0.9

# Product Range

- Molding Inductors
- General

TCC	Series	Size (mm)	Thickness Max. (mm)	Inductance Range																
				0.1 uH	0.47 uH	1 uH	2.2 uH	4.7 uH	10 uH	22 uH	47 uH	100 uH	150 uH							
SPM Series Molding - General	SPM2012_K8	2.0*1.2	0.8		0.47 uH		2.2 uH													
	SPM2016_PA	2.0*1.6	1				2.2 uH													
	SPM2016_WA	2.0*1.6	1		0.47 uH		2.2 uH													
	SPM2520_PA	2.5*2.0	1				2.2 uH													
	SPM2520_KA	2.5*2.0	1					4.7 uH	10 uH											
	SPM2520_WA	2.5*2.0	1		0.22 uH		4.7 uH													
	SPM2520_HA	2.5*2.0	1		0.24 uH		3.3 uH													
	SPM2520_WC	2.5*2.0	1.2		0.47 uH		4.7 uH													
	SPM4040_KA	4.0*4.0	1					6.8 uH	10 uH											
	SPM4040_BA	4.0*4.0	1					2.2 uH	10 uH											
	SPM4040_SC	4.0*4.0	1.2		0.33 uH		4.7 uH													
	SPM4040_BC	4.0*4.0	1.2		0.15 uH		4.7 uH													
	SPM4040_SE	4.0*4.0	1.5				1 uH													
	SPM4040_SH	4.0*4.0	2		0.22 uH				10 uH											
	SPM4040_BH	4.0*4.0	2		0.1 uH				10 uH											
	SPM4040_SL	4.0*4.0	3					4.7 uH	10 uH											
	SPM5050_SE	5.0*5.0	1.5		0.22 uH				10 uH											
	SPM5050_BE	5.0*5.0	1.5		0.47 uH		4.7 uH													
	SPM5050_SG	5.0*5.0	1.8				1 uH		10 uH											
	SPM5050_BG	5.0*5.0	1.8		0.47 uH				10 uH											
	SPM5050_SH	5.0*5.0	2		0.22 uH				10 uH											
	SPM5050_SL	5.0*5.0	3				1 uH								22 uH					
	SPM5050_BL	5.0*5.0	3		0.1 uH				10 uH											
	SPM7070_KA	7.0*7.0	1					2.2 uH	10 uH											
	SPM7070_BA	7.0*7.0	1					4.7 uH	10 uH											
	SPM7070_SE	7.0*7.0	1.5		0.22 uH				10 uH											
	SPM7070_BE	7.0*7.0	1.5		0.47 uH				10 uH											
	SPM7070_SG	7.0*7.0	1.8		0.1 uH				10 uH											
	SPM7070_BG	7.0*7.0	1.8		0.1 uH										22 uH					
	SPM7070_SI	7.0*7.0	2.4		0.22 uH				10 uH											
	SPM7070_BI	7.0*7.0	2.4		0.22 uH										22 uH					
	SPM7070_SL	7.0*7.0	3		0.1 uH										47 uH					
	SPM7070_BL	7.0*7.0	3		0.1 uH										47 uH					
	SPM7070_CL	7.0*7.0	3		0.1 uH										47 uH					
	SPM7070_SN	7.0*7.0	4						6.8 uH		33 uH									
	SPM7070_BN	7.0*7.0	4		0.68 uH										47 uH					
	SPM7070_SQ	7.0*7.0	5		0.36 uH										68 uH					
	SPM7070_BQ	7.0*7.0	5		0.47 uH										47 uH					
	SPM8080_SN	8.0*8.0	4				1 uH		10 uH											
	SPM8080_BN	8.0*8.0	4		0.22 uH										47 uH					
SPM1010_SN	10.0*10.0	4					2.2 uH							68 uH						
SPM1010_TN	10.0*10.0	4		0.47 uH			1.5 uH													
SPM1010_BN	10.0*10.0	4		0.15 uH										100 uH						
SPM1010_SW	10.0*10.0	5.5							10 uH					100 uH						
SPM1313_SM	13.0*13.0	3.5				1 uH	2.2 uH													
SPM1313_SQ	13.0*13.0	5					2.2 uH						22 uH							
SPM1313_TQ	13.0*13.0	5		0.68 uH			1.5 uH													
SPM1313_BQ	13.0*13.0	5		0.22 uH									68 uH							
SPM1313_SR	13.0*13.0	6					2.2 uH											150 uH		
SPM1313_BR	13.0*13.0	6						4.7 uH										150 uH		
SPM1717_SU	17.0*17*0	7							10 uH	33 uH										
SPM1717_BU	17.0*17.0	7					1.5 uH							100 uH						
SPM2222_SX	22.0*22.0	13						4.7 uH		20 uH										
SPM2222_BX	22.0*22.0	13				1 uH								100 uH						

Power Inductors

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## ● Industrial

TCC	Series	Size (mm)	Thickness Max.(mm)	Inductance Range					
				0.1uH	1uH	10uH	100uH		
SIM Series Molding - Industrial	SIM1313_SN	13.0*13.0	4				22 uH	100 uH	
	SIM1313_SR	13.0*13.0	6				22 uH	100 uH	

## ■ Automotive Application

### ● General Molding

TCC	Series	Size (mm)	Thickness Max.(mm)	Inductance Range					
				0.1uH	1uH	10uH	100uH		
SAM Series Molding Inductor (AutoMotive)	SAM4040_SC	4.0*4.0	1.2		0.33 uH		4.7 uH		
	SAM4040_LC	4.0*4.0	1.2		0.33 uH		4.7 uH		
	SAM4040_SH	4.0*4.0	2		0.22 uH		10 uH		
	SAM4040_LH	4.0*4.0	2		0.22 uH		10 uH		
	SAM5050_SE	5.0*5.0	1.5		0.22 uH		10 uH		
	SAM5050_LE	5.0*5.0	1.5		0.22 uH		10 uH		
	SAM5050_SG	5.0*5.0	1.8			1 uH	10 uH		
	SAM5050_LG	5.0*5.0	1.8			1 uH	10 uH		
	SAM5050_SH	5.0*5.0	2		0.22 uH		10 uH		
	SAM5050_LH	5.0*5.0	2		0.22 uH		10 uH		
	SAM5050_SL	5.0*5.0	3			1 uH		22 uH	
	SAM5050_LL	5.0*5.0	3			1 uH		22 uH	
	SAM5050_SN	5.0*5.0	4				4.7 uH	33 uH	
	SAM5050_L/TN	5.0*5.0	4				4.7 uH	33 uH	
	SAM7070_SE	7.0*7.0	1.5		0.22 uH		10 uH		
	SAM7070_LE	7.0*7.0	1.5		0.22 uH		10 uH		
	SAM7070_SG	7.0*7.0	1.8		0.1 uH		10 uH		
	SAM7070_LG	7.0*7.0	1.8		0.1 uH		10 uH		
	SAM7070_SL	7.0*7.0	3		0.1 uH			47 uH	
	SAM7070_LL	7.0*7.0	3		0.1 uH			47 uH	
	SAM7070_SN	7.0*7.0	4				6.8 uH	33 uH	
	SAM7070_LN	7.0*7.0	4				6.8 uH	33 uH	
	SAM7070_SQ	7.0*7.0	5		0.36 uH			68 uH	
	SAM7070_LQ	7.0*7.0	5		0.36 uH			68 uH	
	SAM8080_SW	8.0*8.0	5.5				2.2 uH		100 uH
	SAM8080_LW	8.0*8.0	5.5				2.2 uH		100 uH
	SAM1010_TN	10.0*10.0	4		0.47 uH		1.5 uH		
	SAM1010_SN	10.0*10.0	4				2.2 uH		100 uH
	SAM1010_LN	10.0*10.0	4		0.47 uH				100 uH
	SAM1010_SW	10.0*10.0	5.5				6.8 uH		100 uH
	SAM1010_LW	10.0*10.0	5.5				6.8 uH		100 uH
	SAM1313_TQ	13.0*13.0	5			0.68 uH	1.5 uH		
SAM1313_SQ	13.0*13.0	5				2.2 uH	22 uH		
SAM1313_SR	13.0*13.0	6				2.2 uH		150 uH	
SAM1313_LR	13.0*13.0	6				3.3 uH		150 uH	

## ● High Efficiency Molding

TCC	Series	Size (mm)	Thickness Max.(mm)	Inductance Range					
				0.1uH	1uH	10uH	100uH		
AIM Series Molding - Insert Cylinder (Auto Motive)	AIM1313_SN	13.0*13.0	4				22 uH	100 uH	
	AIM1313_SR	13.0*13.0	6				22 uH	100 uH	

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## ● Double Molding

TCC	Series	Size (mm)	Thickness Max.(mm)	Inductance Range					
				0.1uH	1uH	10uH	100uH		
ACM Series Double Molding (Auto Motive)	ACM7070_SR	7.0*7.0	6			4.7 uH	33 uH		
	ACM1010_SY	10.0*10.0	8			10 uH	47 uH		
	ACM1313_SS	13.0*13.0	6.5			10 uH	33 uH		
	ACM1313_SY	13.0*13.0	8			10 uH	15 uH		
	ACM1313_SV	13.0*13.0	9				22 uH	33 uH	
	ACM1313_SO	13.0*13.0	10				22 uH	33 uH	

## ■ Coating Inductor

### ● Metal Coating

TCC	Series	Size (mm)	Thickness Max.(mm)	Inductance Range				
				0.1uH	1uH	10uH	100uH	
SPS Series Coating Inductor	SPS2016_CA	2.0*1.6	1		0.47 uH	10 uH		
	SPS2520_CA	2.5*2.0	1		0.47 uH	10 uH		
	SPS2520_CC	2.5*2.0	1.2		0.47 uH	6.8 uH		
	SPS3030_CA	3.0*3.0	1		0.47 uH	10 uH		
	SPS3030_CC	3.0*3.0	1.2	0.33 uH		4.7 uH		
	SPS4040_CA	4.0*4.0	1		0.47 uH	10 uH		
	SPS4040_CC	4.0*4.0	1.2		0.47 uH	10 uH		
	SPS4040_CH	4.0*4.0	2.1		0.33 uH		22 uH	

### ● Normal

TCC	Series	Size (mm)	Thickness Max.(mm)	Inductance Range				
				0.1uH	1uH	10uH	100uH	
SPN Series Coating Inductor Normal	SPN2016_SA	2.0*1.6	1		0.47 uH	10 uH		
	SPN2520_SA	2.5*2.0	1		0.5 uH	10 uH		
	SPN2520_SC	2.5*2.0	1.2	0.24 uH		10 uH		
	SPN3030_S/CA	3.0*3.0	1.1	2.2 uH		10 uH		
	SPN3030_SC	3.0*3.0	1.3		1 uH		47 uH	
	SPN3030_SE	3.0*3.0	1.7		1 uH		47 uH	
	SPN4040_SC	4.0*4.0	1.2		1 uH		22 uH	
	SPN4040_SG	4.0*4.0	1.8		1 uH		22 uH	
	SPN4040_SL	4.0*4.0	3.1		0.68 uH		33 uH	
	SPN5050_SH	5.0*5.0	2.2		0.47 uH		22 uH	
	SPN5050_SN	5.0*5.0	4		1 uH			100 uH
	SPN6060_SC	6.0*6.0	1.2			6.8 uH 10 uH		
	SPN6060_SH	6.0*6.0	2		0.8 uH		22 uH	
	SPN6060_SK	6.0*6.0	2.8			2.2 uH		220 uH
	SPN6060_SP	6.0*6.0	4.5		1 uH		33 uH	
	SPN8080_SN	8.0*8.0	4.2		1 uH			100 uH

## ■ Multi-Layer Inductor

### ● General

TCC	Series	Size (mm)	Thickness Max.(mm)	Inductance Range								
				0.1uH		1uH		10uH				
IP Series Ferrite	IP1608_S8	1.6*0.80	0.95				1 uH	2.2 uH				
	IP2012_S9	2.0*1.25	1			0.47 uH		4.7 uH				
	IP2012_L9	2.0*1.25	1					2.2 uH	4.7 uH			
	IP2016_S9	2.0*1.60	1			0.47 uH		4.7 uH				
	IP2520_S9	2.5*2.00	1			0.47 uH		4.7 uH				

## ■ Metal Multi-Layer Inductor

### ● General

TCC	Series	Size (mm)	Thickness Max.(mm)	Inductance Range								
				0.1uH		1uH		10uH				
IP Series Metal	IP1608_S8	1.6*0.80	0.65			0.47 uH	1 uH					
	IP2012_C8	2.0*1.25	0.8		0.11 uH	0.47 uH						

## Molding Inductors (SPM / SIM Series)

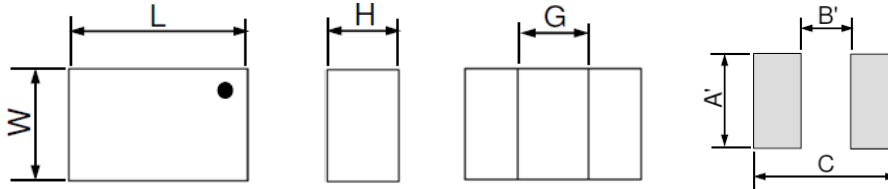
### Feature

1. Magnetic shielded construction
2. Frequency range up to 3.0MHz
3. Higher rated current, capable handling at high current spikes

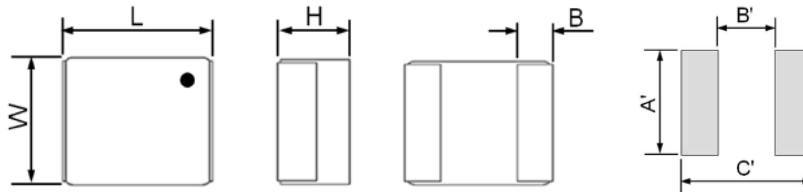
### Application

1. Notebook / Desktop applications
2. VGA card applications
3. DC-DC Converter applications
4. Low profile, high current power supplies

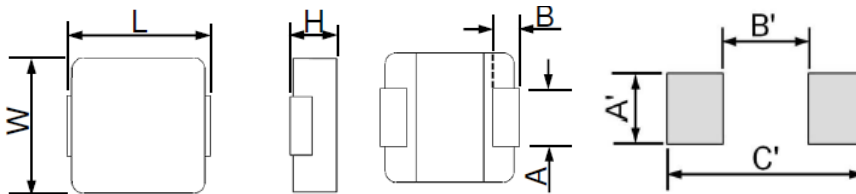
### External Dimension



Series	L (mm)	W (mm)	H (mm)	G (Typ)	Recommended Land Patterns			Package	
					A' (mm)	B' (mm)	C' (mm)	Reel	Amount(pcs)
SPM2012□□□□PK8	2.0±0.2	1.2±0.2	0.8Max	0.6	1.3	0.5	2.1	7"	3,000
SPM2520□□□□PKA	2.5±0.2	2.0±0.2	1.0max	0.7	2.1	0.6	2.6	7"	3,000
SPM2520□□□□PHA*	2.5±0.2	2.0±0.2	0.8±0.2	0.7±0.3	2.1	0.6	2.6	7"	3,000



Series	L (mm)	W (mm)	H (mm)	B (mm)	Recommended Land Patterns			Package	
					A' (mm)	B' (mm)	C' (mm)	Reel	Amount(pcs)
SPM2016□□□□PPA	2.0±0.1	1.6±0.1	1.0max	0.5±0.2	1.6	0.7	2.0	7"	3,000
SPM2016□□□□PWA	2.0±0.2	1.6±0.2	1.0max	0.5±0.3	1.6	0.9	2.0	7"	3,000
SPM2520□□□□PPA	2.5±0.2	2.0±0.2	1.0max	0.6±0.2	2.0	1.2	2.8	7"	3,000
SPM2520□□□□PWA	2.5±0.2	2.0±0.2	1.0max	0.6±0.3	2.0	1.2	2.8	7"	3,000
SPM2520□□□□PWC	2.5±0.2	2.0±0.2	1.2max	0.6±0.3	2.0	1.2	2.8	7"	3,000

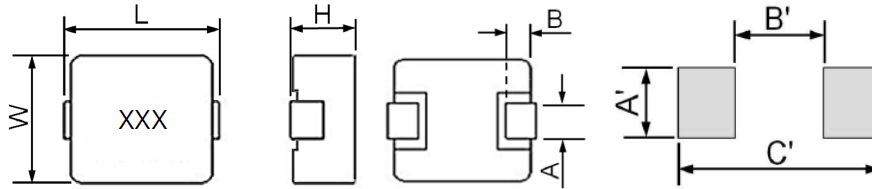


Series	L (mm)	W (mm)	H (mm)	A (mm)	B (mm)	Recommended Land Patterns			Package	
						A' (mm)	B' (mm)	C' (mm)	Reel	Amount(pcs)
SPM4040□□□□EKA	4.1±0.2	4.1±0.2	0.8±0.2	1.8±0.2	0.8±0.2	2.0	2.2	4.4	13"	3,000
SPM4040□□□□EBA	4.1±0.2	4.1±0.2	0.8±0.2	1.8±0.2	0.8±0.2	2.2	2.2	4.4	13"	5,000
SPM4040□□□□ESC	4.7±0.3	4.2±0.2	1.0±0.2	2.0±0.3	0.8±0.3	2.5	2.4	5.4	13"	3,500
SPM4040□□□□ESE	4.7±0.3	4.2±0.2	1.3±0.2	2.0±0.3	0.8±0.3	2.5	2.4	5.4	13"	3,500
SPM4040□□□□ESH	4.7±0.3	4.2±0.2	1.8±0.2	2.0±0.3	0.8±0.3	2.5	2.4	5.4	13"	2,000
SPM4040□□□□ESL	4.7±0.3	4.2±0.2	2.8±0.2	2.0±0.3	0.8±0.3	2.5	2.4	5.4	13"	2,000

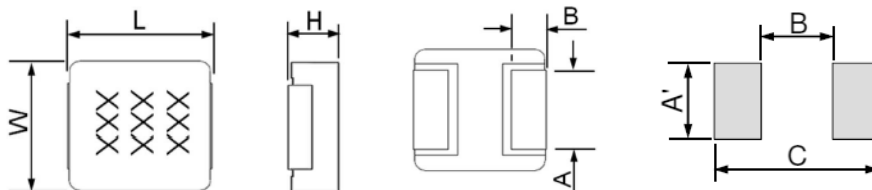
\*New Series

For some special parts, please see the "Part Number & Characteristic" for detail specification





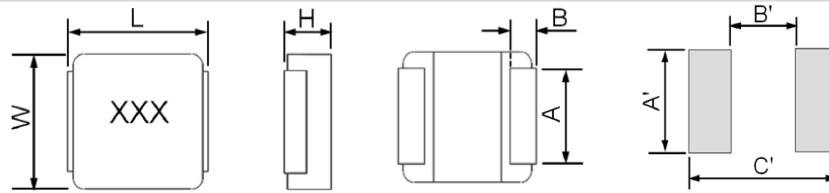
Series	L (mm)	W (mm)	H (mm)	A (mm)	B (mm)	Recommended Land Patterns			Package	
						A' (mm)	B' (mm)	C' (mm)	Reel	Amount(pcs)
SPM4040□□□□EBC	4.4±0.35	4.2±0.25	1.0±0.2	2.0±0.3	0.8±0.3	2.5	2.2	5.2	13"	3,500
SPM4040□□□□EBH	4.4±0.35	4.2±0.25	1.8±0.2	2.0±0.3	0.8±0.3	2.5	2.2	5.2	13"	3,000
SPM5050□□□□ESE	5.7±0.3	5.2±0.2	1.3±0.2	2.5±0.3	1.0±0.3	3.5	3.0	7.0	13"	3,000
SPM5050□□□□EBE	5.4±0.35	5.2±0.2	1.3±0.2	2.2±0.3	1.2±0.2	2.4	2.2	6.0	13"	3,000
SPM5050□□□□ESG	5.7±0.3	5.2±0.2	1.6±0.2	2.5±0.3	1.0±0.3	3.5	3.0	7.0	13"	3,000
SPM5050□□□□EBG	5.4±0.35	5.2±0.2	1.6±0.2	2.2±0.3	1.2±0.2	2.5	2.2	6.0	13"	2,000
SPM5050□□□□ESH	5.7±0.3	5.2±0.2	1.8±0.2	2.5±0.3	1.0±0.3	3.5	3.0	7.0	13"	3,000
SPM5050□□□□ESL	5.7±0.3	5.2±0.2	2.8±0.2	2.5±0.3	1.0±0.3	3.5	3.0	7.0	13"	2,000
SPM5050□□□□EBL	5.4±0.35	5.2±0.2	2.8±0.2	2.2±0.3	1.2±0.2	2.5	2.2	6.0	13"	2,000
SPM7070□□□□ESE	7.0±0.3	6.6±0.2	1.3±0.2	3.0±0.5	1.5±0.3	3.5	4.0	8.5	13"	2,000
SPM7070□□□□EBE	7.0±0.3	6.6±0.2	1.3±0.2	3.0±0.3	1.6±0.3	3.5	3.7	8.4	13"	2,000
SPM7070□□□□ESG	7.2±0.3	6.6±0.2	1.6±0.2	3.0±0.5	1.5±0.3	3.5	4.0	8.5	13"	2,000
SPM7070□□□□EBG	7.0±0.3	6.6±0.2	1.6±0.2	3.0±0.3	1.6±0.3	3.5	3.7	8.4	13"	2,000
SPM7070□□□□ESI	7.2±0.3	6.6±0.2	2.2±0.2	3.0±0.5	1.5±0.3	3.5	4.0	8.5	13"	1,500
SPM7070□□□□EBI	7.0±0.3	6.6±0.2	2.2±0.2	3.0±0.3	1.6±0.3	3.5	3.7	8.4	13"	1,500
SPM7070□□□□E_L	7.3±0.3	6.6±0.3	2.8±0.2	3.0±0.3	1.6±0.3	3.5	3.7	8.4	13"	1,500
SPM7070□□□□ESL	7.3±0.3	6.6±0.3	2.8±0.2	3.0±0.5	1.5±0.3	3.5	4.0	8.5	13"	1,500
SPM7070□□□□ESL	7.2±0.3	6.6±0.2	2.8±0.2	3.0±0.5	1.5±0.3	3.5	4.0	8.5	13"	2,000
SPM7070□□□□ESN	7.2±0.3	6.6±0.2	3.8±0.2	3.0±0.5	1.5±0.3	3.5	4.0	8.5	13"	1,000
SPM7070□□□□EBN	7.0±0.3	6.6±0.2	3.8±0.2	3.0±0.3	1.6±0.3	3.5	3.7	8.4	13"	1,000
SPM7070□□□□ESQ	7.2±0.3	6.6±0.2	4.8±0.2	3.0±0.5	1.5±0.3	3.5	4.0	8.5	13"	1,000
SPM7070□□□□EBQ	7.0±0.3	6.6±0.2	4.8±0.2	3.0±0.3	1.6±0.3	3.5	3.7	8.4	13"	1,000
SPM8080□□□□ESN	8.65±0.25	8.0±0.2	3.8±0.2	5.1±0.3	1.6±0.3	5.4	4.8	9.6	13"	800
SPM8080□□□□EBN	8.8±0.4	8.2±0.3	3.8±0.2	5.0±0.3	1.4±0.3	5.5	4.0	9.5	13"	800
SPM1010□□□□E_N	11.2±0.3	10.0±0.2	3.8±0.2	3.0±0.5	2.0±0.5	4.0	5.5	13.5	13"	800
SPM1010□□□□EBN	11.5MAX	10.0±0.3	3.8±0.2	3.0±0.5	2.0±0.5	4.1	5.4	13.6	13"	500
SPM1010□□□□ESW	11.2±0.3	10.0±0.2	5.3±0.2	3.0±0.5	2.0±0.5	4.0	5.5	13.5	13"	500
SPM1313□□□□ESM	13.9±0.3	12.8±0.2	3.3±0.2	5.0±0.5	2.0±0.3	6.0	8.0	14.5	13"	500
SPM1313□□□□E_Q	13.9±0.3	12.8±0.2	4.8±0.2	5.0±0.5	2.0±0.3	6.0	8.0	14.5	13"	500
SPM1313□□□□EBQ	13.45±0.35	12.6±0.3	4.8±0.2	R22~2R2 3.85 ±0.5 3R3~680 5.0±0.3	2.0±0.5	5.5	8.0	14.5	13"	500
SPM1313□□□□ESR	13.9±0.3	12.8±0.2	5.8±0.2	5.0±0.5	2.0±0.3	6.0	8.0	14.5	13"	500
SPM1313□□□□EBR	13.45±0.35	12.6±0.3	5.8±0.2	5.0±0.3	2.0±0.5	5.5	8.0	14.5	13"	500
SIM1313□□□□ESN	13.9±0.3	12.8±0.2	3.8±0.2	5.0±0.5	2.0±0.3	6.0	8.0	14.5	13"	500
SIM1313□□□□ESR	13.9±0.3	12.8±0.2	5.8±0.2	5.0±0.5	2.0±0.3	6.0	8.0	14.5	13"	500



Series	L (mm)	W (mm)	H (mm)	A (mm)	B (mm)	Recommended Land Patterns			Package	
						A' (mm)	B (mm)	C (mm)	Reel	Amount(pcs)
SPM7070□□□□EKA	6.1±0.3	6.1±0.3	0.8±0.2	4.0±0.3	1.75±0.3	4.5	2.8	7.5	13"	2,000
SPM7070□□□□EBA	6.1±0.3	6.1±0.3	0.8±0.2	4.0±0.3	1.75±0.3	4.5	2.8	7.5	13"	3,000

\*New Series

For some special parts, please see the "Part Number & Characteristic" for detail specification



Series	L (mm)	W (mm)	H (mm)	A (mm)	B (mm)	Recommended Land Patterns			Package	
						A' (mm)	B' (mm)	C' (mm)	Reel	Amount(pcs)
SPM1717□□□□ESU	17.15±0.35	17.0±0.15	6.8±0.2	12.0±0.5	2.6±0.7	12.8	11.2	18.2	13"	300
SPM1717□□□□EBU	17.15±0.35	17.15MAX	7.0MAX	12.0±0.3	2.5±0.5	12.8	11.2	18.2	13"	200
SPM2222□□□□ESX	22.5±0.5	22.0±0.5	13.0Max	18.5±0.5	5.0±0.5	18.8	11.5	23.3	13"	50
SPM2222□□□□EBX	23.5±0.5	22.0±0.3	12.6±0.4	19.0±0.3	5.0±0.4	19.6	12.5	24.0	13"	80

\*New Series

For some special parts, please see the "Part Number & Characteristic" for detail specification

## ■ Part Numbers & Characteristics (General Purpose)

### ● SPM2012

DARFON P/N	Size		Thickness (mm)	Inductance		Inductance Tolerance %	DC Resistance (mΩ)		Heat Rating Current I <sub>dc</sub> (mA)		Saturation Current I <sub>sat</sub> (mA)		Measuring Condition
	Length	Width	Max.	Value	Unit		Typ.	Max.	Typ.	Max.	Typ.	Max.	
SPM2012R47MPK8	2.00	1.20	0.80	0.47	uH	± 20%	26.0	30.0	3,900	3,700	4,800	4,300	1MHz/1V
SPM20121R0MPK8				1.00	uH	± 20%	45.0	55.0	3,500	3,200	3,800	3,300	1MHz/1V
SPM20122R2MPK8				2.20	uH	± 20%	90.0	110.0	1,800	1,600	2,100	1,900	1MHz/1V

※ Saturation current (I<sub>sat</sub>) : the maximum DC current will cause inductance drop approximately 30% from initial value.

※ Heat rating current (I<sub>dc</sub>) : the maximum DC current will cause temperature rising approximately 40°C.

### ● SPM2016

DARFON P/N	Size		Thickness (mm)	Inductance		Inductance Tolerance %	DC Resistance (mΩ)		Heat Rating Current I <sub>dc</sub> (mA)		Saturation Current I <sub>sat</sub> (mA)		Measuring Condition
	Length	Width	Max.	Value	Unit		Typ.	Max.	Typ.	Max.	Typ.	Max.	
SPM20162R2MPPA	2.00	1.60	1.00	2.20	uH	± 20%	142.0	150.0	2,200	2,000	2,650	2,450	1MHz/1V
SPM2016R47MPWA	2.00	1.60	1.00	0.47	uH	± 20%	33.0	40.0	3,500	3,150	4,400	4,000	1MHz/1V
SPM20161R0MPWA				1.00	uH	± 20%	60.0	69.0	2,600	2,260	2,900	2,610	1MHz/1V
SPM20161R5MPWA				1.50	uH	± 20%	114.0	129.0	2,000	1,810	2,500	2,250	1MHz/1V
SPM20162R2MPWA				2.20	uH	± 20%	135.0	150.0	1,700	1,500	1,900	1,710	1MHz/1V

※ Saturation current (I<sub>sat</sub>) : the maximum DC current will cause inductance drop approximately 30% from initial value.

※ Heat rating current (I<sub>dc</sub>) : the maximum DC current will cause temperature rising approximately 40°C.

### ● SPM2520

DARFON P/N	Size		Thickness (mm)	Inductance		Inductance Tolerance %	DC Resistance (mΩ)		Heat Rating Current I <sub>dc</sub> (mA)		Saturation Current I <sub>sat</sub> (mA)		Measuring Condition			
	Length	Width	Max.	Value	Unit		Typ.	Max.	Typ.	Max.	Typ.	Max.				
SPM25202R2MPPA	2.50	2.0	1.0	2.20	uH	±20%	89.0	102.0	2,400	2,200	3,400	3,000	1MHz/1V			
SPM25204R7MPKA	2.50	2.0	1.0	4.70	uH	±20%	200.0	240.0	1,600	1,400	2,150	1,950	1MHz/1V			
SPM2520100MPKA				10.0	uH	±20%	500.0	575.0	1,050	950	1,400	1,300	1MHz/1V			
SPM2520R22MPWA	2.50	2.00	1.00	0.22	uH	±20%	9.0	12.5	5,900	5,300	7,900	7,200	1MHz/1V			
SPM2520R33MPWA				0.33	uH	±20%	21.0	26.0	4,400	4,000	6,600	6,000	1MHz/1V			
SPM2520R47MPWA				0.47	uH	±20%	27.0	32.0	3,900	3,510	5,000	4,500	1MHz/1V			
SPM2520R68MPWA				0.68	uH	±20%	37.0	44.0	3,400	3,060	4,300	3,870	1MHz/1V			
SPM25201R0MPWA				1.00	uH	±20%	45.0	54.0	3,000	2,700	3,500	3,150	1MHz/1V			
SPM25201R5MPWA				1.50	uH	±20%	76.0	91.0	2,500	2,250	2,600	2,340	1MHz/1V			
SPM25202R2MPWA				2.20	uH	±20%	99.0	119.0	2,300	2,070	2,400	2,160	1MHz/1V			
SPM25204R7MPWA				4.70	uH	±20%	220.0	262.0	1,360	1,220	1,800	1,620	1MHz/1V			
SPM2520R24MPHA				2.50	2.00	1.00	0.24	uH	±20%	8.5	11.0	8,500	7,700	8,800	8,400	1MHz/1V
SPM2520R33MPHA							0.33	uH	±20%	13.0	16.0	7,500	7,000	8,500	8,000	1MHz/1V
SPM2520R47MPHA	0.47	uH	±20%				16.0	20.0	5,000	4,700	7,000	6,500	1MHz/1V			
SPM25201R0MPHA	1.00	uH	±20%				30.0	33.0	4,700	4,500	5,400	5,000	1MHz/1V			
SPM25201R5MPHA	1.50	uH	±20%				37.0	42.0	4,100	3,600	4,000	3,700	1MHz/1V			
SPM25202R2MPHA	2.20	uH	±20%				57.0	65.0	3,300	2,600	3,500	3,200	1MHz/1V			
SPM25203R3MPHA	3.30	uH	±20%				86.0	100.0	2,200	2,000	2,600	2,500	1MHz/1V			
SPM2520R47MPWC	2.50	2.00	1.2	0.47	uH	±20%	21.0	25.0	4,600	4,180	5,300	4,950	1MHz/1V			
SPM25201R0MPWC				1.00	uH	±20%	41.0	49.0	3,500	3,180	4,400	4,040	1MHz/1V			
SPM25201R5MPWC				1.50	uH	±20%	64.0	77.0	2,500	2,270	3,200	2,910	1MHz/1V			
SPM25202R2MPWC				2.20	uH	±20%	85.0	98.0	2,270	2,060	3,000	2,730	1MHz/1V			
SPM25204R7MPWC				4.70	uH	±20%	196.0	235.0	1,610	1,400	1,900	1,580	1MHz/1V			

※ Saturation current (I<sub>sat</sub>) : the maximum DC current will cause inductance drop approximately 30% from initial value.

※ Heat rating current (I<sub>dc</sub>) : the maximum DC current will cause temperature rising approximately 40°C.

### ● SPM4040

DARFON P/N	Size		Thickness (mm)	Inductance		Inductance Tolerance %	DC Resistance (mΩ)		Heat Rating Current I <sub>dc</sub> (mA)		Saturation Current I <sub>sat</sub> (mA)		Measuring Condition
	Length	Width	Max	Value	Unit		Typ.	Max.	Typ.	Max.	Typ.	Max.	
SPM40406R8MEKA	4.10	4.10	1.00	6.80	uH	±20%	210.0	255.0	1,750	1,600	2,100	1,700	100KHz/1V
SPM4040100MEKA				10.00	uH	±20%	280.0	336.0	1,750	1,500	1,850	1,650	100KHz/1V

This catalog contains typical product specifications. When you consider using our products, please check our product specification sheets. (Characteristic diagram, reliability information, application notes... etc.) [https://www.darfon.com.tw/Component\\_Integration/en/](https://www.darfon.com.tw/Component_Integration/en/)

DARFON P/N	Size		Thickness (mm)	Inductance		Inductance Tolerance %	DC Resistance (mΩ)		Heat Rating Current I <sub>dc</sub> (mA)		Saturation Current I <sub>sat</sub> (mA)		Measuring Condition
	Length	Width		Max	Value		Unit	Typ.	Max.	Typ.	Max.	Typ.	
SPM40402R2MEBA	4.10	4.10	1.00	2.20	uH	±20%	85.0	100.0	3,400	3,000	4,300	3,500	100KHz/1V
SPM40404R7MEBA				4.70	uH	±20%	140.0	160.0	2,600	2,300	2,500	2,100	100KHz/1V
SPM40406R8MEBA				6.80	uH	±20%	210.0	255.0	2,000	1,800	2,200	1,850	100KHz/1V
SPM4040100MEBA				10.00	uH	±20%	280.0	336.0	1,500	1,300	1,800	1,600	100KHz/1V
SPM4040R33MESC	4.70	4.20	1.20	0.33	uH	±20%	14.0	16.5	--	6,500	--	9,000	100KHz/1V
SPM4040R47MESC				0.47	uH	±20%	19.0	21.0	--	6,000	--	6,800	100KHz/1V
SPM4040R68MESC				0.68	uH	±20%	32.0	36.0	--	4,500	--	6,000	100KHz/1V
SPM40401R0MESC				1.00	uH	±20%	43.0	47.0	--	4,200	--	5,200	100KHz/1V
SPM40401R5MESC				1.50	uH	±20%	68.0	75.0	--	3,250	--	4,000	100KHz/1V
SPM40402R2MESC				2.20	uH	±20%	79.4	83.5	--	2,750	--	3,500	100KHz/1V
SPM40403R3MESC				3.30	uH	±20%	120.0	138.0	--	2,300	--	3,000	100KHz/1V
SPM40404R7MESC				4.70	uH	±20%	175.0	195.0	--	1,800	--	2,800	100KHz/1V
SPM4040R15MEBC	4.40	4.20	1.20	0.15	uH	±20%	7.5	9.0	--	7,500	--	15,000	100KHz/1V
SPM4040R22MEBC				0.22	uH	±20%	9.0	11.0	--	7,000	--	11,000	100KHz/1V
SPM4040R33MEBC				0.33	uH	±20%	16.0	19.0	--	6,500	--	8,400	100KHz/1V
SPM4040R47MEBC				0.47	uH	±20%	19.0	21.0	--	6,000	--	6,800	100KHz/1V
SPM4040R68MEBC				0.68	uH	±20%	32.0	36.0	--	4,700	--	6,000	100KHz/1V
SPM40401R0MEBC				1.00	uH	±20%	43.0	47.0	--	4,500	--	5,500	100KHz/1V
SPM40401R5MEBC				1.50	uH	±20%	68.0	75.0	--	3,250	--	4,000	100KHz/1V
SPM40402R2MEBC				2.20	uH	±20%	79.4	83.5	--	2,750	--	3,000	100KHz/1V
SPM40404R7MEBC	4.70	uH	±20%	175.0	195.0	--	1,800	--	2,200	100KHz/1V			
SPM40401R0MESE	4.70	4.20	1.50	1.00	uH	±20%	31.0	38.0	6,000	4,300	8,900	6,700	100KHz/1V
SPM4040R22MESH	4.70	4.20	2.00	0.22	uH	±20%	6.0	6.6	--	9,000	--	12,500	100KHz/1V
SPM4040R47MESH				0.47	uH	±20%	12.5	14.0	--	7,000	--	9,500	100KHz/1V
SPM4040R68MESH				0.68	uH	±20%	19.4	21.0	--	5,200	--	8,000	100KHz/1V
SPM40401R0MESH				1.00	uH	±20%	24.0	27.0	--	4,500	--	7,000	100KHz/1V
SPM40401R5MESH				1.50	uH	±20%	38.0	46.0	--	4,000	--	6,000	100KHz/1V
SPM40402R2MESH				2.20	uH	±20%	52.0	58.0	--	3,000	--	5,000	100KHz/1V
SPM40403R3MESH				3.30	uH	±20%	74.0	87.0	--	2,500	--	4,000	100KHz/1V
SPM40404R7MESH				4.70	uH	±20%	92.0	105.0	--	2,200	--	3,000	100KHz/1V
SPM40406R8MESH				6.80	uH	±20%	162.0	178.0	--	2,000	--	2,100	100KHz/1V
SPM4040100MESH				10.00	uH	±20%	256.0	282.0	--	1,600	--	1,800	100KHz/1V
SPM4040R10MEBH	4.40	4.20	2.00	0.10	uH	±20%	3.4	4.0	--	13,000	--	22,000	100KHz/1V
SPM4040R22MEBH				0.22	uH	±20%	6.0	6.6	--	9,500	--	12,500	100KHz/1V
SPM4040R33MEBH				0.33	uH	±20%	9.8	11.0	--	10,000	--	12,000	100KHz/1V
SPM4040R47MEBH				0.47	uH	±20%	12.5	14.0	--	7,500	--	9,500	100KHz/1V
SPM4040R56MEBH				0.56	uH	±20%	14.0	16.0	--	7,000	--	9,000	100KHz/1V
SPM4040R68MEBH				0.68	uH	±20%	16.5	18.0	--	7,000	--	8,000	100KHz/1V
SPM40401R0MEBH				1.00	uH	±20%	24.0	27.0	--	6,000	--	7,000	100KHz/1V
SPM40401R2MEBH				1.20	uH	±20%	22.0	27.0	--	6,000	--	6,500	100KHz/1V
SPM40401R5MEBH				1.50	uH	±20%	38.0	46.0	--	5,000	--	5,500	100KHz/1V
SPM40402R2MEBH				2.20	uH	±20%	52.0	58.0	--	4,500	--	5,000	100KHz/1V
SPM40403R3MEBH				3.30	uH	±20%	74.0	87.0	--	3,300	--	3,500	100KHz/1V
SPM40404R7MEBH				4.70	uH	±20%	92.0	105.0	--	2,800	--	3,000	100KHz/1V
SPM40406R8MEBH				6.80	uH	±20%	160.0	175.0	--	2,400	--	2,500	100KHz/1V
SPM4040100MEBH				10.00	uH	±20%	256.0	282.0	--	1,600	--	2,000	100KHz/1V
SPM40404R7MESL	4.70	4.20	3.00	4.70	uH	±20%	53.5	61.5	--	3,500	--	4,000	100KHz/1V
SPM4040100MESL				10.00	uH	±20%	145.0	160.0	--	2,500	--	2,800	100KHz/1V

※ Saturation current (I<sub>sat</sub>) : the maximum DC current will cause inductance drop approximately 30% from initial value.

※ Heat rating current (I<sub>dc</sub>) : the maximum DC current will cause temperature rising approximately 40°C.

## ● SPM5050

DARFON P/N	Size		Thickness (mm)	Inductance		Inductance Tolerance %	DC Resistance (mΩ)		Heat Rating Current I <sub>dc</sub> (mA)		Saturation Current I <sub>sat</sub> (mA)		Measuring Condition
	Length	Width		Max.	Value		Unit	Typ.	Max.	Typ.	Max.	Typ.	
SPM5050R22NESE	5.70	5.20	1.50	0.22	uH	±30%	5.8	7.0	--	10,000	--	17,000	100KHz/1V
SPM50501R0MESE				1.00	uH	±20%	20.0	23.0	--	6,500	--	9,000	100KHz/1V

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DARFON P/N	Size		Thickness (mm) Max.	Inductance		Inductance Tolerance %	DC Resistance (mΩ)		Heat Rating Current I <sub>dc</sub> (mA)		Saturation Current I <sub>sat</sub> (mA)		Measuring Condition
	Length	Width		Value	Unit		Typ.	Max.	Typ.	Max.	Typ.	Max.	
SPM50501R5MESE	5.70	5.20	1.50	1.50	uH	±20%	46.0	53.0	--	4,200	--	7,000	100KHz/1V
SPM50502R2MESE				2.20	uH	±20%	58.0	64.0	--	3,300	--	6,000	100KHz/1V
SPM50503R3MESE				3.30	uH	±20%	70.0	80.0	--	3,200	--	4,500	100KHz/1V
SPM50504R7MESE				4.70	uH	±20%	103.0	115.0	--	3,000	--	4,000	100KHz/1V
SPM50506R8MESE				6.80	uH	±20%	167.0	180.0	--	2,500	--	3,200	100KHz/1V
SPM5050100MESE				10.00	uH	±20%	220.0	246.0	--	2,000	--	3,000	100KHz/1V
SPM5050R47MEBE	5.40	5.20	1.50	0.47	uH	±20%	11.5	13.0	9,500	8,700	13,000	12,000	100KHz/1V
SPM5050R68MEBE				0.68	uH	±20%	13.4	15.5	9,000	8,100	11,200	9,500	100KHz/1V
SPM50501R0MEBE				1.00	uH	±20%	20.0	23.0	6,500	5,800	9,500	8,000	100KHz/1V
SPM50503R3MEBE				3.30	uH	±20%	63.0	72.0	3,300	3,000	4,500	4,000	100KHz/1V
SPM50504R7MEBE				4.70	uH	±20%	92.0	106.0	3,000	2,600	4,200	3,700	100KHz/1V
SPM50501R0MESG	5.70	5.20	1.80	1.00	uH	±20%	15.0	17.0	--	8,000	--	9,500	100KHz/1V
SPM50502R2MESG				2.20	uH	±20%	31.0	35.0	--	5,000	--	6,500	100KHz/1V
SPM50504R7MESG				4.70	uH	±20%	78.0	85.0	--	3,500	--	4,000	100KHz/1V
SPM50506R8MESG				6.80	uH	±20%	107.0	120.0	--	2,800	--	3,400	100KHz/1V
SPM5050100MESG	10.00	uH	±20%	140.0	155.0	--	2,500	--	3,000	100KHz/1V			
SPM5050R47MEBG	5.40	5.20	1.80	0.47	uH	±20%	7.5	9.0	--	10,500	--	15,500	100KHz/1V
SPM5050R56MEBG				0.56	uH	±20%	8.5	10.0	--	9,500	--	15,000	100KHz/1V
SPM5050R68MEBG				0.68	uH	±20%	12.0	13.8	--	8,900	--	11,200	100KHz/1V
SPM50501R0MEBG				1.00	uH	±20%	15.0	17.0	--	8,000	--	9,000	100KHz/1V
SPM50501R5MEBG				1.50	uH	±20%	23.0	26.0	--	7,500	--	8,000	100KHz/1V
SPM50502R2MEBG				2.20	uH	±20%	31.0	35.0	--	5,000	--	6,500	100KHz/1V
SPM50503R3MEBG				3.30	uH	±20%	51.0	58.0	--	4,500	--	5,000	100KHz/1V
SPM50504R7MEBG				4.70	uH	±20%	78.0	85.0	--	3,500	--	4,000	100KHz/1V
SPM50506R8MEBG				6.80	uH	±20%	107.0	120.0	--	2,800	--	3,400	100KHz/1V
SPM5050100MEBG				10.00	uH	±20%	140.0	155.0	--	2,500	--	3,000	100KHz/1V
SPM5050R22MESH	5.70	5.20	2.00	0.22	uH	±20%	4.1	4.5	--	12,000	--	20,000	100KHz/1V
SPM5050R24MESH				0.24	uH	±20%	5.0	5.8	--	11,700	--	18,500	100KHz/1V
SPM5050R33MESH				0.33	uH	±20%	5.5	5.9	--	11,500	--	16,000	100KHz/1V
SPM5050R47MESH				0.47	uH	±20%	8.0	10.0	--	10,500	--	15,500	100KHz/1V
SPM5050R56MESH				0.56	uH	±20%	8.2	10.0	--	10,000	--	13,000	100KHz/1V
SPM5050R68MESH				0.68	uH	±20%	10.5	13.0	--	9,500	--	12,000	100KHz/1V
SPM50501R0MESH				1.00	uH	±20%	15.0	17.0	--	8,000	--	9,500	100KHz/1V
SPM50501R2MESH				1.20	uH	±20%	19.5	22.5	--	7,000	--	9,000	100KHz/1V
SPM50501R5MESH				1.50	uH	±20%	24.2	27.5	--	6,000	--	8,500	100KHz/1V
SPM50502R2MESH				2.20	uH	±20%	30.0	35.0	--	5,000	--	6,500	100KHz/1V
SPM50503R3MESH				3.30	uH	±20%	49.0	55.0	--	4,500	--	5,500	100KHz/1V
SPM50504R7MESH				4.70	uH	±20%	75.3	81.3	--	3,500	--	4,500	100KHz/1V
SPM50505R6MESH				5.60	uH	±20%	85.2	92.0	--	3,000	--	4,000	100KHz/1V
SPM50506R8MESH				6.80	uH	±20%	107.0	120.0	--	2,800	--	3,600	100KHz/1V
SPM5050100MESH	10.00	uH	±20%	140.0	155.0	--	2,400	--	3,400	100KHz/1V			
SPM50501R0MESL	5.70	5.20	3.00	1.00	uH	±20%	13.0	14.0	--	7,000	--	11,000	100KHz/1V
SPM50501R5MESL				1.50	uH	±20%	18.0	25.0	--	6,200	--	9,500	100KHz/1V
SPM50502R2MESL				2.20	uH	±20%	29.0	35.0	--	5,500	--	9,000	100KHz/1V
SPM50503R3MESL				3.30	uH	±20%	32.0	38.0	--	5,000	--	7,000	100KHz/1V
SPM50504R7MESL				4.70	uH	±20%	50.0	60.0	--	4,400	--	6,000	100KHz/1V
SPM50506R8MESL				6.80	uH	±20%	75.0	88.5	--	3,400	--	3,800	100KHz/1V
SPM5050100MESL				10.00	uH	±20%	95.0	114.0	--	2,500	--	3,500	100KHz/1V
SPM5050220MESL				22.00	uH	±20%	230.0	275.0	--	2,300	--	2,100	100KHz/1V
SPM5050R10MEBL	5.40	5.20	3.00	0.10	uH	±20%	2.5	3.0	--	25,000	--	30,000	100KHz/1V
SPM5050R20MEBL				0.20	uH	±20%	3.2	3.9	--	14,000	--	20,000	100KHz/1V
SPM5050R33MEBL				0.33	uH	±20%	4.6	5.5	--	14,000	--	18,000	100KHz/1V
SPM5050R47MEBL				0.47	uH	±20%	7.0	8.5	--	11,000	--	15,000	100KHz/1V
SPM5050R68MEBL				0.68	uH	±20%	10.0	12.0	--	9,000	--	11,500	100KHz/1V
SPM50501R0MEBL				1.00	uH	±20%	11.0	14.0	--	8,500	--	10,000	100KHz/1V
SPM50501R2MEBL				1.20	uH	±20%	13.0	16.0	--	8,500	--	9,500	100KHz/1V
SPM50501R5MEBL	1.50	uH	±20%	18.0	25.0	--	8,200	--	9,000	100KHz/1V			

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DARFON P/N	Size		Thickness (mm) Max.	Inductance		Inductance Tolerance %	DC Resistance (mΩ)		Heat Rating Current I <sub>dc</sub> (mA)		Saturation Current I <sub>sat</sub> (mA)		Measuring Condition
	Length	Width		Value	Unit		Typ.	Max.	Typ.	Max.	Typ.	Max.	
SPM50502R2MEBL	5.40	5.20	3.00	2.20	uH	±20%	24.0	29.0	--	7,000	--	7,000	100KHz/1V
SPM50503R3MEBL				3.30	uH	±20%	32.0	38.0	--	5,500	--	6,000	100KHz/1V
SPM50504R7MEBL				4.70	uH	±20%	50.0	60.0	--	4,500	--	4,600	100KHz/1V
SPM50506R8MEBL				6.80	uH	±20%	75.0	90.0	--	3,500	--	3,600	100KHz/1V
SPM5050100MEBL				10.00	uH	±20%	105.0	125.0	--	3,200	--	3,500	100KHz/1V

※ Saturation current (I<sub>sat</sub>) : the maximum DC current will cause inductance drop approximately 30% from initial value.

※ Heat rating current (I<sub>dc</sub>) : the maximum DC current will cause temperature rising approximately 40°C.

## ● SPM7070

DARFON P/N	Size		Thickness (mm) Max.	Inductance		Inductance Tolerance %	DC Resistance (mΩ)		Heat Rating Current I <sub>dc</sub> (mA)		Saturation Current I <sub>sat</sub> (mA)		Measuring Condition			
	Length	Width		Value	Unit		Max.	Max.	Typ.	Max.	Typ.	Max.				
SPM70702R2MEKA	6.10	6.10	1.00	2.20	uH	±20%	85.0	102.0	3,200	2,800	4,800	4,300	100KHz/1V			
SPM70704R7MEKA				4.70	uH	±20%	144.0	172.0	2,200	2,000	2,800	2,500	100KHz/1V			
SPM70706R8MEKA				6.80	uH	±20%	164.0	197.0	2,000	1,800	2,500	2,200	100KHz/1V			
SPM7070100MEKA				10.00	uH	±20%	220.0	264.0	1,650	1,550	2,800	2,300	100KHz/1V			
SPM70704R7MEBA	6.10	6.10	1.00	4.70	uH	±20%	144.0	172.0	2,200	2,000	2,800	2,500	100KHz/1V			
SPM70706R8MEBA				6.80	uH	±20%	164.0	197.0	2,000	1,800	2,500	2,200	100KHz/1V			
SPM7070100MEBA				10.00	uH	±20%	270.0	310.0	1,600	1,400	2,100	1,900	100KHz/1V			
SPM7070R22MESE	7.00	6.60	1.50	0.22	uH	±20%	5.1	5.8	--	11,000	--	22,000	100KHz/1V			
SPM7070R33MESE				0.33	uH	±20%	6.8	7.8	--	10,000	--	19,500	100KHz/1V			
SPM7070R47MESE				0.47	uH	±20%	8.5	9.8	--	9,500	--	16,000	100KHz/1V			
SPM7070R56MESE				0.56	uH	±20%	9.5	11.0	--	9,000	--	14,000	100KHz/1V			
SPM7070R68MESE				0.68	uH	±20%	12.5	14.5	--	8,000	--	12,000	100KHz/1V			
SPM7070R82MESE				0.82	uH	±20%	15.0	17.0	--	7,000	--	10,000	100KHz/1V			
SPM70701R0MESE				1.00	uH	±20%	18.5	21.0	--	5,500	--	9,000	100KHz/1V			
SPM70701R2MESE				1.20	uH	±20%	21.0	30.0	--	5,400	--	8,500	100KHz/1V			
SPM70701R5MESE				1.50	uH	±20%	37.0	42.5	--	5,000	--	7,000	100KHz/1V			
SPM70702R2MESE				2.20	uH	±20%	41.0	50.0	--	4,900	--	6,100	100KHz/1V			
SPM70703R3MESE				3.30	uH	±20%	54.0	63.0	--	3,300	--	5,500	100KHz/1V			
SPM70704R7MESE				4.70	uH	±20%	76.0	85.0	--	3,000	--	5,000	100KHz/1V			
SPM70706R8MESE				6.80	uH	±20%	125.0	135.0	--	2,500	--	4,000	100KHz/1V			
SPM7070100MESE				10.00	uH	±20%	165.0	175.0	--	2,000	--	3,000	100KHz/1V			
SPM7070R47MEBE				7.00	6.60	1.50	0.47	uH	± 20%	7.3	8.5	--	10,000	--	16,000	100KHz/1V
SPM7070R56MEBE							0.56	uH	± 20%	9.5	11.0	--	9,000	--	14,000	100KHz/1V
SPM7070R68MEBE	0.68	uH	± 20%				10.0	12.0	--	8,500	--	12,000	100KHz/1V			
SPM7070R82MEBE	0.82	uH	± 20%				15.0	17.0	--	8,000	--	10,000	100KHz/1V			
SPM70701R0MEBE	1.00	uH	± 20%				18.5	21.0	--	6,000	--	9,000	100KHz/1V			
SPM70702R2MEBE	2.20	uH	± 20%				43.0	54.0	--	3,800	--	7,000	100KHz/1V			
SPM70703R3MEBE	3.30	uH	± 20%				54.0	63.0	--	3,500	--	5,500	100KHz/1V			
SPM70704R7MEBE	4.70	uH	± 20%				76.0	85.0	--	3,200	--	5,000	100KHz/1V			
SPM70706R8MEBE	6.80	uH	± 20%				125.0	135.0	--	2,500	--	4,000	100KHz/1V			
SPM7070100MEBE	10.00	uH	± 20%				165.0	175.0	--	2,000	--	3,000	100KHz/1V			
SPM7070R10MESG	7.20	6.60	1.80	0.10	uH	±20%	1.9	2.3	--	18,000	--	30,000	100KHz/1V			
SPM7070R22MESG				0.22	uH	±20%	4.5	5.2	--	14,000	--	29,000	100KHz/1V			
SPM7070R33MESG				0.33	uH	±20%	5.2	6.8	--	12,000	--	22,000	100KHz/1V			
SPM7070R47MESG				0.47	uH	±20%	7.3	8.4	--	11,000	--	17,000	100KHz/1V			
SPM7070R68MESG				0.68	uH	±20%	10.8	12.7	--	9,000	--	16,000	100KHz/1V			
SPM7070R82MESG				0.82	uH	±20%	13.4	15.9	--	8,000	--	14,000	100KHz/1V			
SPM70701R0MESG				1.00	uH	±20%	14.5	17.0	--	7,000	--	12,000	100KHz/1V			
SPM70701R5MESG				1.50	uH	±20%	20.0	26.0	--	6,000	--	10,000	100KHz/1V			
SPM70702R2MESG				2.20	uH	±20%	31.0	35.0	--	5,000	--	8,000	100KHz/1V			
SPM70703R3MESG				3.30	uH	±20%	56.0	60.0	--	3,500	--	7,000	100KHz/1V			
SPM70704R7MESG				4.70	uH	±20%	60.0	75.0	--	3,500	--	5,500	100KHz/1V			
SPM70706R8MESG				6.80	uH	±20%	101.0	110.0	--	2,800	--	4,500	100KHz/1V			
SPM70708R2MESG				8.20	uH	±20%	124.0	142.0	--	2,500	--	4,000	100KHz/1V			
SPM7070100MESG				10.00	uH	±20%	155.0	166.0	--	2,000	--	3,000	100KHz/1V			

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DARFONP/N	Size		Thickness (mm) Max.	Inductance		Inductance Tolerance %	DC Resistance (mΩ)		Heat Rating Current I <sub>dc</sub> (mA)		Saturation Current I <sub>sat</sub> (mA)		Measuring Condition			
	Length	Width		Value	Unit		Max.	Max.	Typ.	Max.	Typ.	Max.				
SPM7070R10MEBG	7.00	6.60	1.80	0.10	uH	± 20%	1.9	2.3	--	25,000	--	38,000	100KHz/1V			
SPM7070R22MEBG				0.22	uH	± 20%	3.0	3.5	--	22,000	--	24,000	100KHz/1V			
SPM7070R47MEBG				0.47	uH	± 20%	7.3	8.4	--	11,500	--	18,000	100KHz/1V			
SPM7070R68MEBG				0.68	uH	± 20%	10.0	12.0	--	9,500	--	16,500	100KHz/1V			
SPM70701R0MEBG				1.00	uH	± 20%	13.6	16.0	--	8,500	--	12,000	100KHz/1V			
SPM70701R5MEBG				1.50	uH	± 20%	20.0	26.0	--	8,000	--	9,200	100KHz/1V			
SPM70702R2MEBG				2.20	uH	± 20%	31.0	35.0	--	7,000	--	8,000	100KHz/1V			
SPM70703R3MEBG				3.30	uH	± 20%	47.0	50.0	--	4,500	--	6,000	100KHz/1V			
SPM70704R7MEBG				4.70	uH	± 20%	50.0	62.0	--	4,000	--	5,000	100KHz/1V			
SPM70706R8MEBG				6.80	uH	± 20%	101.0	110.0	--	3,000	--	4,500	100KHz/1V			
SPM7070100MEBG				10.00	uH	± 20%	145.0	155.0	--	2,300	--	4,000	100KHz/1V			
SPM7070220MEBG				22.00	uH	± 20%	325.0	350.0	--	1,800	--	2,300	100KHz/1V			
SPM7070R22MESI	7.20	6.60	2.40	0.22	uH	± 20%	2.5	3.0	--	21,000	--	34,000	100KHz/1V			
SPM70703R3MESI				3.30	uH	± 20%	31.0	39.0	--	5,500	--	8,000	100KHz/1V			
SPM70706R8MESI				6.80	uH	± 20%	57.0	70.0	--	4,000	--	6,000	100KHz/1V			
SPM7070100MESI				10.00	uH	± 20%	92.0	101.0	--	3,100	--	4,000	100KHz/1V			
SPM7070R22MEBI	7.00	6.60	2.40	0.22	uH	± 20%	2.5	3.0	--	21,000	--	34,000	100KHz/1V			
SPM7070R33MEBI				0.33	uH	± 20%	3.4	4.1	--	18,000	--	24,500	100KHz/1V			
SPM7070R47MEBI				0.47	uH	± 20%	4.2	5.1	--	15,000	--	22,000	100KHz/1V			
SPM7070R56MEBI				0.56	uH	± 20%	5.4	6.5	--	13,000	--	17,000	100KHz/1V			
SPM7070R68MEBI				0.68	uH	± 20%	5.8	7.0	--	12,000	--	16,000	100KHz/1V			
SPM70701R0MEBI				1.00	uH	± 20%	11.2	13.5	--	9,000	--	15,000	100KHz/1V			
SPM70701R5MEBI				1.50	uH	± 20%	16.5	20.0	--	8,200	--	13,500	100KHz/1V			
SPM70702R2MEBI				2.20	uH	± 20%	22.0	28.0	--	7,000	--	10,000	100KHz/1V			
SPM70703R3MEBI				3.30	uH	± 20%	31.0	39.0	--	5,500	--	8,000	100KHz/1V			
SPM70704R7MEBI				4.70	uH	± 20%	40.0	50.0	--	5,000	--	6,500	100KHz/1V			
SPM70706R8MEBI				6.80	uH	± 20%	57.0	70.0	--	4,000	--	6,000	100KHz/1V			
SPM7070100MEBI				10.00	uH	± 20%	92.0	101.0	--	3,100	--	4,000	100KHz/1V			
SPM7070150MEBI				15.00	uH	± 20%	140.0	160.0	--	2,500	--	3,300	100KHz/1V			
SPM7070220MEBI				22.00	uH	± 20%	210.0	230.0	--	2,000	--	2,500	100KHz/1V			
SPM7070R10NECL				7.30	6.60	3.00	0.10	uH	±30%	1.3	1.7	--	32,500	--	60,000	100KHz/1V
SPM7070R15NECL							0.15	uH	±20%	1.5	1.9	--	27,000	--	45,000	100KHz/1V
SPM7070R22NECL	0.22	uH	±20%				2.1	2.8	--	23,000	--	40,000	100KHz/1V			
SPM7070R33NECL	0.33	uH	±20%				3.0	3.9	--	20,000	--	32,000	100KHz/1V			
SPM7070R47NECL	0.47	uH	±20%				3.2	4.2	--	17,500	--	26,000	100KHz/1V			
SPM7070R56NECL	0.56	uH	±20%				3.8	5.0	--	16,500	--	36,500	100KHz/1V			
SPM7070R68NECL	0.68	uH	±20%				4.2	5.5	--	15,500	--	25,000	100KHz/1V			
SPM7070R82NECL	0.82	uH	±20%				6.4	8.0	--	13,000	--	24,000	100KHz/1V			
SPM70701R0NECL	1.00	uH	±20%				8.5	10.0	--	11,000	--	22,000	100KHz/1V			
SPM70701R5NECL	1.50	uH	±20%				12.0	15.0	--	9,000	--	18,000	100KHz/1V			
SPM70702R2NECL	2.20	uH	±20%				16.0	20.0	--	8,000	--	14,000	100KHz/1V			
SPM70703R3NECL	3.30	uH	±20%				22.0	30.0	--	6,000	--	13,500	100KHz/1V			
SPM70704R7NECL	4.70	uH	±20%				31.0	40.0	--	5,500	--	10,000	100KHz/1V			
SPM70705R6NECL	5.60	uH	±20%				40.0	48.0	--	5,000	--	9,000	100KHz/1V			
SPM70706R8NECL	6.80	uH	±20%				50.0	60.0	--	4,500	--	8,000	100KHz/1V			
SPM70708R2NECL	8.20	uH	±20%				56.0	68.0	--	4,000	--	7,500	100KHz/1V			
SPM7070100NECL	10.00	uH	±20%				71.0	85.0	--	3,500	--	6,000	100KHz/1V			
SPM7070150NECL	15.00	uH	±20%				102.0	123.0	--	3,000	--	4,000	100KHz/1V			
SPM7070220NECL	22.00	uH	±20%				160.0	190.0	--	2,000	--	3,500	100KHz/1V			
SPM7070330NECL	33.00	uH	±20%				210.0	240.0	--	2,000	--	2,500	100KHz/1V			
SPM7070470NECL	47.00	uH	±20%	320.0	363.0	--	1,750	--	2,000	100KHz/1V						
SPM7070R10NESL	7.20	6.60	3.00	0.10	uH	±30%	1.5	1.7	--	32,500	--	60,000	100KHz/1V			
SPM7070R15NESL				0.15	uH	±30%	1.5	1.8	--	24,000	--	41,000	100KHz/1V			
SPM7070R22MESL				0.22	uH	±20%	2.5	2.8	--	23,000	--	34,000	100KHz/1V			
SPM7070R33MESL				0.33	uH	±20%	3.0	3.5	--	21,000	--	25,000	100KHz/1V			
SPM7070R47MESL				0.47	uH	±20%	3.5	4.1	--	18,000	--	20,000	100KHz/1V			
SPM7070R56MESL				0.56	uH	±20%	3.9	4.5	--	16,500	--	18,000	100KHz/1V			

This catalog contains typical product specifications. When you consider using our products, please check our product specification sheets. (Characteristic diagram, reliability information, application notes... etc.) [https://www.darfon.com.tw/Component\\_Integration/en/](https://www.darfon.com.tw/Component_Integration/en/)

DARFONP/N	Size		Thickness (mm) Max.	Inductance		Inductance Tolerance %	DC Resistance (mΩ)		Heat Rating Current Idc (mA)		Saturation Current Isat (mA)		Measuring Condition
	Length	Width		Value	Unit		Max.	Max.	Typ.	Max.	Typ.	Max.	
SPM7070R68MESL	7.20	6.60	3.00	0.68	uH	±20%	4.5	5.0	--	16,000	--	17,000	100KHz/1V
SPM7070R82MESL				0.82	uH	±20%	7.0	7.5	--	14,000	--	16,000	100KHz/1V
SPM70701R0MESL				1.00	uH	±20%	8.5	9.0	--	12,000	--	15,000	100KHz/1V
SPM70701R5MESL				1.50	uH	±20%	10.6	12.1	--	10,000	--	13,000	100KHz/1V
SPM70702R2MESL				2.20	uH	±20%	15.5	18.0	--	8,000	--	10,000	100KHz/1V
SPM70703R3MESL				3.30	uH	±20%	25.0	28.0	--	6,500	--	9,000	100KHz/1V
SPM70704R7MESL				4.70	uH	±20%	32.5	35.0	--	5,500	--	6,500	100KHz/1V
SPM70705R6MESL				5.60	uH	±20%	36.0	42.0	--	5,000	--	6,250	100KHz/1V
SPM70706R8MESL				6.80	uH	±20%	43.9	50.0	--	4,500	--	6,000	100KHz/1V
SPM70708R2MESL				8.20	uH	±20%	54.0	60.0	--	4,500	--	6,000	100KHz/1V
SPM7070100MESL				10.00	uH	±20%	62.0	68.0	--	4,000	--	5,500	100KHz/1V
SPM7070150MESL				15.00	uH	±20%	105.0	125.0	--	3,000	--	4,000	100KHz/1V
SPM7070220MESL				22.00	uH	±20%	144.0	160.0	--	2,500	--	3,000	100KHz/1V
SPM7070330MESL				33.00	uH	±20%	230.0	255.0	--	2,000	--	3,300	100KHz/1V
SPM7070470MESL				47.00	uH	±20%	285.0	320.0	--	1,750	--	2,450	100KHz/1V
SPM7070R10MEBL	7.00	6.60	3.00	0.10	uH	± 20%	0.9	1.0	40,000	35,000	60,000	48,000	100KHz/1V
SPM7070R15MEBL				0.15	uH	± 20%	2.0	2.4	30,000	25,000	41,000	35,000	100KHz/1V
SPM7070R22MEBL				0.22	uH	± 20%	2.5	3.0	24,000	21,000	34,000	32,000	100KHz/1V
SPM7070R33MEBL				0.33	uH	± 20%	3.0	3.5	21,000	20,000	25,000	22,000	100KHz/1V
SPM7070R47MEBL				0.47	uH	± 20%	3.5	4.1	18,000	16,000	20,000	18,000	100KHz/1V
SPM7070R56MEBL				0.56	uH	± 20%	3.9	4.5	16,500	15,000	18,000	16,000	100KHz/1V
SPM7070R68MEBL				0.68	uH	± 20%	4.7	5.3	16,000	14,500	17,000	15,000	100KHz/1V
SPM7070R82MEBL				0.82	uH	± 20%	5.6	6.0	14,000	13,000	16,000	14,000	100KHz/1V
SPM70701R0MEBL				1.00	uH	± 20%	6.9	7.4	12,000	11,200	15,000	13,500	100KHz/1V
SPM70701R5MEBL				1.50	uH	± 20%	10.6	12.1	12,000	9,500	14,000	12,000	100KHz/1V
SPM70702R2MEBL				2.20	uH	± 20%	12.5	15.0	9,500	8,500	12,000	10,500	100KHz/1V
SPM70702R7MEBL				2.70	uH	± 20%	17.2	20.0	8,800	8,200	10,000	9,000	100KHz/1V
SPM70703R3MEBL				3.30	uH	± 20%	19.6	22.0	8,500	8,000	9,500	8,700	100KHz/1V
SPM70704R7MEBL				4.70	uH	± 20%	29.2	33.0	6,000	5,500	9,000	7,500	100KHz/1V
SPM70705R6MEBL				5.60	uH	± 20%	36.0	42.0	5,500	5,000	6,500	5,500	100KHz/1V
SPM70706R8MEBL				6.80	uH	± 20%	42.0	48.0	5,000	4,500	6,000	5,200	100KHz/1V
SPM70708R2MEBL				8.20	uH	± 20%	54.0	60.0	5,000	4,000	5,500	5,000	100KHz/1V
SPM7070100MEBL				10.00	uH	± 20%	62.0	68.0	4,500	3,800	5,500	4,900	100KHz/1V
SPM7070150MEBL				15.00	uH	± 20%	95.0	113.0	3,000	2,600	4,000	3,500	100KHz/1V
SPM7070220MEBL				22.00	uH	± 20%	150.0	170.0	2,500	2,200	3,000	2,500	100KHz/1V
SPM7070330MEBL	33.00	uH	± 20%	245.0	270.0	2,000	1,800	2,500	2,100	100KHz/1V			
SPM7070470MEBL	47.00	uH	± 20%	350.0	385.0	1,500	1,300	2,000	1,800	100KHz/1V			
SPM70706R8MESN	7.20	6.60	4.00	6.80	uH	±20%	38.0	46.0	--	4,700	--	7,500	100KHz/1V
SPM7070330MESN				33.00	uH	±20%	190.0	228.0	--	2,500	--	3,000	100KHz/1V
SPM7070R68MEBN	7.00	6.60	4.00	0.68	uH	±20%	3.2	4.8	--	17,000	--	19,000	100KHz/1V
SPM70701R0MEBN				1.00	uH	±20%	5.0	6.6	--	13,500	--	16,000	100KHz/1V
SPM70701R5MEBN				1.50	uH	±20%	8.2	10.0	--	12,400	--	12,500	100KHz/1V
SPM70702R2MEBN				2.20	uH	±20%	11.5	14.0	--	10,000	--	11,000	100KHz/1V
SPM70703R3MEBN				3.30	uH	±20%	16.0	20.0	--	8,500	--	9,500	100KHz/1V
SPM70704R7MEBN				4.70	uH	±20%	24.0	30.0	--	6,500	--	9,000	100KHz/1V
SPM70706R8MEBN				6.80	uH	±20%	37.5	45.0	--	5,500	--	6,500	100KHz/1V
SPM70708R2MEBN				8.20	uH	±20%	46.0	55.0	--	5,200	--	6,000	100KHz/1V
SPM7070100MEBN				10.00	uH	±20%	55.0	65.0	--	4,800	--	6,000	100KHz/1V
SPM7070150MEBN				15.00	uH	±20%	80.0	95.0	--	3,700	--	4,500	100KHz/1V
SPM7070220MEBN				22.00	uH	±20%	105.0	125.0	--	3,300	--	4,000	100KHz/1V
SPM7070330MEBN				33.00	uH	±20%	210.0	240.0	--	2,200	--	3,000	100KHz/1V
SPM7070470MEBN	47.00	uH	±20%	285.0	320.0	--	1,800	--	2,500	100KHz/1V			
SPM7070R36MESQ	7.20	6.60	5.00	0.36	uH	±20%	2.7	3.1	--	21,000	--	25,000	100KHz/1V
SPM7070R68MESQ				0.68	uH	±20%	3.3	3.6	--	18,000	--	17,000	100KHz/1V
SPM70701R0MESQ				1.00	uH	±20%	4.5	5.3	--	14,500	--	16,000	100KHz/1V
SPM70701R5MESQ				1.50	uH	±20%	6.0	7.5	--	11,500	--	15,000	100KHz/1V
SPM70702R2MESQ				2.20	uH	±20%	9.0	10.5	--	10,500	--	13,500	100KHz/1V

Power Inductors

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DARFONP/N	Size		Thickness (mm) Max.	Inductance		Inductance Tolerance %	DC Resistance (mΩ)		Heat Rating Current I <sub>dc</sub> (mA)		Saturation Current I <sub>sat</sub> (mA)		Measuring Condition
	Length	Width		Value	Unit		Max.	Max.	Typ.	Max.	Typ.	Max.	
SPM70703R3MESQ	7.20	6.60	5.00	3.30	uH	±20%	14.0	15.0	--	9,000	--	10,000	100KHz/1V
SPM70704R7MESQ				4.70	uH	±20%	23.0	25.0	--	6,500	--	8,000	100KHz/1V
SPM70706R8MESQ				6.80	uH	±20%	31.5	35.5	--	5,500	--	6,500	100KHz/1V
SPM7070100MESQ				10.00	uH	±20%	42.0	50.0	--	4,500	--	5,000	100KHz/1V
SPM7070150MESQ				15.00	uH	±20%	76.0	85.0	--	3,800	--	4,600	100KHz/1V
SPM7070220MESQ				22.00	uH	±20%	105.0	120.0	--	3,000	--	3,700	100KHz/1V
SPM7070330MESQ				33.00	uH	±20%	155.0	170.0	--	2,600	--	3,100	100KHz/1V
SPM7070470MESQ				47.00	uH	±20%	162.0	178.0	--	2,300	--	2,500	100KHz/1V
SPM7070560MESQ				56.00	uH	±20%	235.0	290.0	--	1,800	--	2,200	100KHz/1V
SPM7070680MESQ				68.00	uH	±20%	280.0	320.0	--	1,700	--	2,400	100KHz/1V
SPM7070R47MEBQ	7.0	6.60	5.00	0.47	uH	±20%	3.3	3.9	--	20,000	--	21,000	100KHz/1V
SPM7070R68MEBQ				0.68	uH	±20%	4.0	4.5	--	16,500	--	18,000	100KHz/1V
SPM70701R0MEBQ				1.00	uH	±20%	5.0	6.6	--	12,000	--	16,000	100KHz/1V
SPM70701R5MEBQ				1.50	uH	±20%	8.0	10.0	--	9,500	--	13,000	100KHz/1V
SPM70702R2MEBQ				2.20	uH	±20%	10.5	12.5	--	9,000	--	11,000	100KHz/1V
SPM70703R3MEBQ				3.30	uH	±20%	20.0	22.0	--	8,500	--	10,000	100KHz/1V
SPM70704R7MEBQ				4.70	uH	±20%	23.0	29.0	--	6,000	--	8,000	100KHz/1V
SPM70706R8MEBQ				6.80	uH	±20%	35.0	41.0	--	5,800	--	6,300	100KHz/1V
SPM70708R2MEBQ				8.20	uH	±20%	40.0	48.0	--	5,500	--	5,500	100KHz/1V
SPM7070100MEBQ				10.00	uH	±20%	50.0	60.0	--	4,500	--	5,300	100KHz/1V
SPM7070150MEBQ				15.00	uH	±20%	80.0	90.0	--	3,100	--	4,000	100KHz/1V
SPM7070220MEBQ				22.00	uH	±20%	125.0	140.0	--	2,600	--	3,500	100KHz/1V
SPM7070330MEBQ				33.00	uH	±20%	170.0	190.0	--	2,300	--	3,000	100KHz/1V
SPM7070470MEBQ				47.00	uH	±20%	210.0	230.0	--	2,000	--	2,600	100KHz/1V

※ Saturation current (I<sub>sat</sub>) : the maximum DC current will cause inductance drop approximately 30% from initial value.

※ Heat rating current (I<sub>dc</sub>) : the maximum DC current will cause temperature rising approximately 40°C.

## ● SPM8080

DARFONP/N	Size		Thickness (mm) Max.	Inductance		Inductance Tolerance %	DC Resistance (mΩ)		Heat Rating Current I <sub>dc</sub> (mA)		Saturation Current I <sub>sat</sub> (mA)		Measuring Condition
	Length	Width		Value	Unit		Typ.	Max.	Typ.	Max.	Typ.	Max.	
SPM80801R0MESN	8.65	8.00	4.00	1.00	uH	±20%	3.9	4.2	20,800	16,000	28,000	21,000	100KHz/1V
SPM8080100MESN				10.00	uH	±20%	36.0	43.0	6,000	5,700	7,700	6,500	100KHz/1V
SPM8080R22MEBN	8.80	8.20	4.00	0.22	uH	±20%	1.6	1.8	36,000	30,000	60,000	55,000	100KHz/1V
SPM8080R33MEBN				0.33	uH	±20%	2.1	2.4	30,000	25,000	45,000	40,000	100KHz/1V
SPM8080R47MEBN				0.47	uH	±20%	2.5	2.8	28,000	25,000	42,000	36,000	100KHz/1V
SPM8080R56MEBN				0.60	uH	±20%	2.9	3.2	24,000	22,000	26,000	23,000	100KHz/1V
SPM8080R68MEBN				0.68	uH	±20%	3.4	3.8	23,000	21,000	24,000	22,000	100KHz/1V
SPM8080R82MEBN				0.82	uH	±20%	4.0	4.4	21,000	19,000	21,000	19,000	100KHz/1V
SPM80801R0MEBN				1.00	uH	±20%	4.2	4.62	19,000	17,000	19,000	17,000	100KHz/1V
SPM80801R5MEBN				1.50	uH	±20%	6.9	7.6	17,000	15,000	17,000	15,000	100KHz/1V
SPM80801R8MEBN				1.80	uH	±20%	9.5	11.0	15,000	12,500	15,000	13,500	100KHz/1V
SPM80802R2MEBN				2.20	uH	±20%	10.0	11.4	14,000	12,000	14,000	12,000	100KHz/1V
SPM80803R3MEBN				3.30	uH	±20%	13.5	15.0	12,000	10,000	12,500	11,000	100KHz/1V
SPM80804R7MEBN				4.70	uH	±20%	24.0	26.5	9,500	8,500	11,500	10,500	100KHz/1V
SPM80805R6MEBN				5.60	uH	±20%	27.0	30.0	9,000	8,000	11,000	10,000	100KHz/1V
SPM80806R8MEBN				6.80	uH	±20%	31.0	36.8	8,000	7,000	9,000	8,000	100KHz/1V
SPM80808R2MEBN				8.20	uH	±20%	38.0	46.0	7,000	6,000	8,700	7,700	100KHz/1V
SPM8080100MEBN				10.00	uH	±20%	49.0	59.0	6,500	5,500	8,000	7,000	100KHz/1V
SPM8080150MEBN				15.00	uH	±20%	60.0	71.0	5,400	4,800	5,500	4,900	100KHz/1V
SPM8080220MEBN				22.00	uH	±20%	100.0	113.0	4,800	4,200	5,000	4,500	100KHz/1V
SPM8080330MEBN				33.00	uH	±20%	135.0	156.0	3,500	3,000	3,500	3,300	100KHz/1V
SPM8080470MEBN				47.00	uH	±20%	200.0	225.0	2,900	2,500	3,100	2,900	100KHz/1V

※ Saturation current (I<sub>sat</sub>) : the maximum DC current will cause inductance drop approximately 30% from initial value.

※ Heat rating current (I<sub>dc</sub>) : the maximum DC current will cause temperature rising approximately 40°C.

● SPM1010

DARFONP/N	Size		Thickness (mm) Max.	Inductance		Inductance Tolerance %	DC Resistance (mΩ)		Heat Rating Current I <sub>dc</sub> (mA)		Saturation Current I <sub>sat</sub> (mA)		Measuring Condition		
	Length	Width		Value	Unit		Typ.	Max.	Typ.	Max.	Typ.	Max.			
SPM1010R47METN	11.20	10.00	4.00	0.47	uH	±20%	2.5	3.0	--	21,000	--	35,000	100KHz/1V		
SPM1010R68METN				0.68	uH	±20%	3.0	3.3	--	18,000	--	29,000	100KHz/1V		
SPM10101R0METN				1.00	uH	±20%	3.3	3.6	--	17,000	--	28,000	100KHz/1V		
SPM10101R2METN				1.20	uH	±20%	4.5	5.4	--	16,000	--	22,000	100KHz/1V		
SPM10101R5METN				1.50	uH	±20%	4.7	5.6	--	15,000	--	21,000	100KHz/1V		
SPM10102R2MESN	11.20	10.00	4.00	2.20	uH	±20%	6.0	7.0	--	12,000	--	18,000	100KHz/1V		
SPM10103R3MESN				3.30	uH	±20%	10.8	11.8	--	10,000	--	16,000	100KHz/1V		
SPM10104R7MESN				4.70	uH	±20%	17.0	20.0	--	8,500	--	15,000	100KHz/1V		
SPM10105R6MESN				5.60	uH	±20%	20.0	23.0	--	8,000	--	14,000	100KHz/1V		
SPM10106R8MESN				6.80	uH	±20%	22.5	25.0	--	7,000	--	12,000	100KHz/1V		
SPM10108R2MESN				8.20	uH	±20%	25.0	27.0	--	6,500	--	9,000	100KHz/1V		
SPM1010100MESN				10.00	uH	±20%	27.0	30.0	--	6,500	--	8,500	100KHz/1V		
SPM1010150MESN				15.00	uH	±20%	40.0	45.0	--	6,300	--	7,000	100KHz/1V		
SPM1010220MESN				22.00	uH	±20%	60.0	66.0	--	5,000	--	5,500	100KHz/1V		
SPM1010330MESN				33.00	uH	±20%	85.0	92.0	--	4,000	--	4,500	100KHz/1V		
SPM1010470MESN				47.00	uH	±20%	130.0	145.0	--	3,000	--	3,500	100KHz/1V		
SPM1010680MESN				68.00	uH	±20%	178.0	195.0	--	2,300	--	3,000	100KHz/1V		
SPM1010R15MEBN				11.5 MAX	10.00	4.00	0.15	uH	±20%	0.6	0.7	--	45,000	--	75,000
SPM1010R22MEBN	0.22	uH	±20%				0.9	1.0	--	35,000	--	60,000	100KHz/1V		
SPM1010R30MEBN	0.30	uH	±20%				1.0	1.1	--	35,000	--	45,000	100KHz/1V		
SPM1010R36MEBN	0.36	uH	±20%				1.1	1.2	--	30,000	--	45,000	100KHz/1V		
SPM1010R47MEBN	0.47	uH	±20%				1.5	1.7	--	30,000	--	40,000	100KHz/1V		
SPM1010R56MEBN	0.56	uH	±20%				1.6	1.8	--	25,000	--	33,000	100KHz/1V		
SPM1010R68MEBN	0.68	uH	±20%				2.1	2.4	--	23,000	--	30,000	100KHz/1V		
SPM1010R80MEBN	0.80	uH	±20%				2.4	2.7	--	23,000	--	29,000	100KHz/1V		
SPM10101R0MEBN	1.00	uH	±20%				3.0	3.3	--	19,000	--	28,000	100KHz/1V		
SPM10101R5MEBN	1.50	uH	±20%				3.8	4.2	--	16,000	--	24,000	100KHz/1V		
SPM10102R2MEBN	2.20	uH	±20%				6.0	7.0	--	12,000	--	16,500	100KHz/1V		
SPM10103R3MEBN	3.30	uH	±20%				10.8	11.8	--	11,000	--	16,000	100KHz/1V		
SPM10104R7MEBN	4.70	uH	±20%				17.0	20.0	--	9,000	--	13,000	100KHz/1V		
SPM10106R8MEBN	6.80	uH	±20%				22.5	25.0	--	8,500	--	12,000	100KHz/1V		
SPM10108R2MEBN	8.20	uH	±20%				25.0	27.0	--	8,000	--	9,000	100KHz/1V		
SPM1010100MEBN	10.00	uH	±20%				27.0	30.0	--	7,800	--	8,500	100KHz/1V		
SPM1010150MEBN	15.00	uH	±20%				40.0	45.0	--	6,500	--	7,000	100KHz/1V		
SPM1010220MEBN	22.00	uH	±20%				60.0	66.0	--	5,000	--	5,500	100KHz/1V		
SPM1010330MEBN	33.00	uH	±20%				85.0	92.0	--	4,400	--	4,800	100KHz/1V		
SPM1010470MEBN	47.00	uH	±20%				130.0	145.0	--	3,300	--	3,500	100KHz/1V		
SPM1010680MEBN	68.00	uH	±20%				178.0	195.0	--	2,500	--	3,000	100KHz/1V		
SPM1010820MEBN	82.00	uH	±20%				260.0	285.0	--	2,300	--	2,800	100KHz/1V		
SPM1010101MEBN	100.00	uH	±20%				315.0	340.0	--	2,000	--	2,300	100KHz/1V		
SPM1010100MESW	11.20	10.00	5.50	10.00	uH	±20%	21.0	24.2	8,000	7,200	12,500	10,500	100KHz/1V		
SPM1010150MESW				15.00	uH	±20%	30.0	33.5	6,700	6,400	9,700	9,700	8,200	8,200	100KHz/1V
SPM1010220MESW				22.00	uH	±20%	47.0	53.0	6,000	5,400	8,800	8,800	7,200	7,200	100KHz/1V
SPM1010330MESW				33.00	uH	±20%	67.0	77.1	4,500	4,200	6,200	6,200	5,200	5,200	100KHz/1V
SPM1010470MESW				47.00	uH	±20%	98.0	114.0	4,100	3,600	4,900	4,900	4,200	4,200	100KHz/1V
SPM1010101MESW				100.00	uH	±20%	200.0	230.0	2,800	2,500	3,610	3,610	3,000	3,000	100KHz/1V

※ Saturation current (I<sub>sat</sub>) : the maximum DC current will cause inductance drop approximately 30% from initial value.

※ Heat rating current (I<sub>dc</sub>) : the maximum DC current will cause temperature rising approximately 40°C.

● SPM1313 / SIM1313

DARFONP/N	Size		Thickness (mm) Max.	Inductance		Inductance Tolerance %	DC Resistance (mΩ)		Heat Rating Current I <sub>dc</sub> (mA)		Saturation Current I <sub>sat</sub> (mA)		Measuring Condition
	Length	Width		Value	Unit		Typ.	Max.	Typ.	Max.	Typ.	Max.	
SPM13131R0MESM	13.90	12.80	3.50	1.00	uH	±20%	3.4	4.2	18,000	17,000	34,000	28,000	100KHz/1V
SPM13132R2MESM				2.20	uH	±20%	6.6	7.5	15,500	11,000	23,500	20,000	20,000
SPM13132R2MESQ	13.90	12.80	5.00	2.20	uH	±20%	4.0	5.0	--	15,000	--	24,000	100KHz/1V
SPM13133R3MESQ				3.30	uH	±20%	5.9	7.0	--	14,000	--	22,000	100KHz/1V
SPM13134R7MESQ				4.70	uH	±20%	8.5	10.5	--	13,000	--	19,000	100KHz/1V
SPM13136R8MESQ				6.80	uH	±20%	13.0	15.5	--	12,000	--	14,000	100KHz/1V
SPM1313100MESQ				10.00	uH	±20%	19.0	22.0	--	9,000	--	12,000	100KHz/1V
SPM1313150MESQ				15.00	uH	±20%	26.0	31.0	--	5,900	--	8,400	100KHz/1V
SPM1313220MESQ				22.00	uH	±20%	51.0	58.0	--	4,500	--	6,500	100KHz/1V

This catalog contains typical product specifications. When you consider using our products, please check our product specification sheets. (Characteristic diagram, reliability information, application notes... etc.) [https://www.darfon.com.tw/Component\\_Integration/en/](https://www.darfon.com.tw/Component_Integration/en/)

DARFONP/N	Size		Thickness (mm)	Inductance		Inductance Tolerance %	DC Resistance (mΩ)		Heat Rating Current I <sub>dc</sub> (mA)		Saturation Current I <sub>sat</sub> (mA)		Measuring Condition
	Length	Width		Max.	Value		Unit	Typ.	Max.	Typ.	Max.	Typ.	
SPM1313R68METQ	13.90	12.80	5.00	0.68	uH	±20%	2.5	3.0	--	23,000	--	38,000	100KHz/1V
SPM13131R0METQ				1.00	uH	±20%	3.0	3.6	--	22,000	--	28,000	100KHz/1V
SPM13131R5METQ				1.50	uH	±20%	3.5	4.2	--	18,500	--	23,000	100KHz/1V
SPM1313R22MEBQ	13.45	12.60	5.00	0.22	uH	±20%	0.6	0.7	--	50,000	--	75,000	100KHz/1V
SPM1313R36MEBQ				0.36	uH	±20%	0.7	0.9	--	42,000	--	50,000	100KHz/1V
SPM1313R50MEBQ				0.50	uH	±20%	1.0	1.2	--	38,000	--	48,000	100KHz/1V
SPM1313R68MEBQ				0.68	uH	±20%	1.4	1.6	--	33,000	--	46,000	100KHz/1V
SPM1313R82MEBQ				0.82	uH	±20%	1.5	1.7	--	30,000	--	39,000	100KHz/1V
SPM13131R0MEBQ				1.00	uH	±20%	2.0	2.2	--	26,000	--	35,000	100KHz/1V
SPM13131R5MEBQ				1.50	uH	±20%	3.9	3.2	--	23,000	--	33,000	100KHz/1V
SPM13132R2MEBQ				2.20	uH	±20%	4.5	5.0	--	15,000	--	24,000	100KHz/1V
SPM13133R3MEBQ				3.30	uH	±20%	6.3	7.0	--	14,000	--	22,000	100KHz/1V
SPM13134R7MEBQ				4.70	uH	±20%	8.2	9.0	--	13,000	--	20,000	100KHz/1V
SPM13136R8MEBQ				6.80	uH	±20%	16.0	18.0	--	12,000	--	16,000	100KHz/1V
SPM13138R2MEBQ				8.20	uH	±20%	18.0	20.0	--	9,500	--	13,000	100KHz/1V
SPM1313100MEBQ				10.00	uH	±20%	20.0	22.0	--	9,000	--	12,000	100KHz/1V
SPM1313150MEBQ				15.00	uH	±20%	26.0	30.0	--	8,000	--	10,000	100KHz/1V
SPM1313220MEBQ				22.00	uH	±20%	52.0	58.0	--	4,500	--	6,500	100KHz/1V
SPM1313330MEBQ				33.00	uH	±20%	75.0	84.0	--	3,500	--	6,000	100KHz/1V
SPM1313470MEBQ				47.00	uH	±20%	115.0	130.0	--	3,000	--	5,000	100KHz/1V
SPM1313680MEBQ	68.00	uH	±20%	130.0	145.0	--	2,800	--	4,500	100KHz/1V			
SPM13132R2MESR	13.90	12.80	6.00	2.20	uH	±20%	3.8	4.1	--	21,000	--	25,000	100KHz/1V
SPM13133R3MESR				3.30	uH	±20%	5.3	6.4	--	17,000	--	22,000	100KHz/1V
SPM13134R7MESR				4.70	uH	±20%	7.2	9.0	--	16,000	--	18,000	100KHz/1V
SPM13136R8MESR				6.80	uH	±20%	9.5	12.0	--	12,000	--	15,000	100KHz/1V
SPM13138R2MESR				8.20	uH	±20%	13.6	16.0	--	11,000	--	13,500	100KHz/1V
SPM1313100MESR				10.00	uH	±20%	18.0	20.7	--	10,000	--	12,500	100KHz/1V
SPM1313120MESR				12.00	uH	±20%	20.0	23.0	--	7,000	--	10,000	100KHz/1V
SPM1313150MESR				15.00	uH	±20%	25.0	29.0	--	6,000	--	9,000	100KHz/1V
SPM1313220MESR				22.00	uH	±20%	34.0	39.5	--	5,000	--	7,500	100KHz/1V
SPM1313270MESR				27.00	uH	±20%	49.0	56.0	--	4,500	--	6,500	100KHz/1V
SPM1313330MESR				33.00	uH	±20%	65.0	75.0	--	4,000	--	6,000	100KHz/1V
SPM1313470MESR				47.00	uH	±20%	80.0	90.0	--	3,500	--	5,500	100KHz/1V
SPM1313680MESR				68.00	uH	±20%	120.0	140.0	--	3,000	--	4,500	100KHz/1V
SPM1313101MESR				100.00	uH	±20%	180.0	200.0	--	2,500	--	3,500	100KHz/1V
SPM1313121MESR				120.00	uH	±20%	210.0	235.0	--	2,300	--	3,200	100KHz/1V
SPM1313151MESR				150.00	uH	±20%	250.0	300.0	--	2,200	--	2,700	100KHz/1V
SPM13134R7MEBR				13.45	12.60	6.00	4.70	uH	±20%	7.2	9.0	--	15,000
SPM13135R6MEBR	5.60	uH	±20%				9.0	11.0	--	13,000	--	22,500	100KHz/1V
SPM13136R8MEBR	6.80	uH	±20%				11.0	13.5	--	12,000	--	19,000	100KHz/1V
SPM13138R2MEBR	8.20	uH	±20%				13.6	16.0	--	11,000	--	13,500	100KHz/1V
SPM1313100MEBR	10.00	uH	±20%				18.0	20.7	--	10,000	--	12,500	100KHz/1V
SPM1313120MEBR	12.00	uH	±20%				20.0	23.0	--	9,000	--	10,000	100KHz/1V
SPM1313150MEBR	15.00	uH	±20%				25.0	29.0	--	8,500	--	9,000	100KHz/1V
SPM1313180MEBR	18.00	uH	±20%				29.0	35.0	--	7,500	--	8,000	100KHz/1V
SPM1313220MEBR	22.00	uH	±20%				34.0	39.5	--	7,000	--	7,500	100KHz/1V
SPM1313270MEBR	27.00	uH	±20%				49.0	56.0	--	6,000	--	6,500	100KHz/1V
SPM1313330MEBR	33.00	uH	±20%				65.0	75.0	--	5,500	--	6,000	100KHz/1V
SPM1313470MEBR	47.00	uH	±20%				80.0	90.0	--	5,000	--	5,500	100KHz/1V
SPM1313680MEBR	68.00	uH	±20%				120.0	140.0	--	4,000	--	4,500	100KHz/1V
SPM1313101MEBR	100.00	uH	±20%				180.0	200.0	--	3,000	--	3,500	100KHz/1V
SPM1313121MEBR	120.00	uH	±20%				200.0	235.0	--	2,000	--	3,200	100KHz/1V
SPM1313151MEBR	150.00	uH	±20%				315.0	350.0	--	1,500	--	2,700	100KHz/1V
SIM1313220MESN	13.90	12.80	4.00				22.00	uH	± 20%	42.5	52.5	6,100	6,000
SIM1313330MESN				33.00	uH	± 20%	63.0	73.0	5,100	5,000	7,300	6,000	100KHz/1V
SIM1313101MESN				100.00	uH	± 20%	215.0	230.0	2,600	2,400	3,800	3,100	100KHz/1V
SIM1313220MESR	13.90	12.80	6.00	22.00	uH	± 20%	29.0	34.0	7,700	7,200	11,000	9,500	100KHz/1V
SIM1313330MESR				33.00	uH	± 20%	43.0	51.0	6,500	6,000	9,000	7,500	100KHz/1V
SIM1313470MESR				47.00	uH	± 20%	60.0	70.0	5,300	4,800	7,800	6,500	100KHz/1V
SIM1313101MESR				100.00	uH	± 20%	130.0	155.0	3,700	3,500	5,300	4,500	100KHz/1V

※ Saturation current (I<sub>sat</sub>) : the maximum DC current will cause inductance drop approximately 30% from initial value.

※ Heat rating current (I<sub>dc</sub>) : the maximum DC current will cause temperature rising approximately 40°C.

● SPM1717

DARFON P/N	Size		Thickness (mm)	Inductance		Inductance Tolerance %	DC Resistance (mΩ)		Heat Rating Current I <sub>dc</sub> (mA)		Saturation Current I <sub>sat</sub> (mA)		Measuring Condition
	Length	Width	Max.	Value	Unit		Typ.	Max.	Typ.	Max.	Typ.	Max.	
SPM1717100MESU	17.15	17.00	7.00	10.00	uH	±20%	9.2	9.9	15,000	14,000	25,000	20,000	100KHz/1V
SPM1717220MESU				22.00	uH	±20%	20.0	23.0	12,000	10,000	14,500	12,000	100KHz/1V
SPM1717330MESU				33.00	uH	±20%	30.0	36.0	9,600	8,900	14,500	11,500	100KHz/1V
SPM17171R5MEBU	17.15	17.15MAX	7.00	1.50	uH	±20%	1.7	2.1	--	33,000	--	40,000	100KHz/1V
SPM17172R2MEBU				2.20	uH	±20%	2.0	2.5	--	29,000	--	34,000	100KHz/1V
SPM17173R3MEBU				3.30	uH	±20%	3.0	4.0	--	24,000	--	30,000	100KHz/1V
SPM17174R7MEBU				4.70	uH	±20%	3.8	4.8	--	21,000	--	24,000	100KHz/1V
SPM17176R8MEBU				6.80	uH	±20%	6.0	7.5	--	17,000	--	22,000	100KHz/1V
SPM17178R2MEBU				8.20	uH	±20%	7.0	8.7	--	13,000	--	20,000	100KHz/1V
SPM1717100MEBU				10.00	uH	±20%	8.0	9.9	--	12,000	--	19,000	100KHz/1V
SPM1717150MEBU				15.00	uH	±20%	13.5	17.0	--	11,000	--	14,500	100KHz/1V
SPM1717220MEBU				22.00	uH	±20%	18.5	23.0	--	8,500	--	11,500	100KHz/1V
SPM1717330MEBU				33.00	uH	±20%	28.0	37.0	--	8,000	--	10,000	100KHz/1V
SPM1717470MEBU				47.00	uH	±20%	37.0	47.0	--	6,000	--	7,500	100KHz/1V
SPM1717680MEBU				68.00	uH	±20%	70.0	85.0	--	5,200	--	6,500	100KHz/1V
SPM1717101MEBU				100.00	uH	±20%	110.0	130.0	--	3,700	--	5,000	100KHz/1V

※Saturation current (I<sub>sat</sub>) : the maximum DC current will cause inductance drop approximately 30% from initial value.

※Heat rating current (I<sub>dc</sub>) : the maximum DC current will cause temperature rising approximately 40°C.

● SPM2222

DARFON P/N	Size		Thickness (mm)	Inductance		Inductance Tolerance %	DC Resistance (mΩ)		Heat Rating Current I <sub>dc</sub> (mA)		Saturation Current I <sub>sat</sub> (mA)		Measuring Condition
	Length	Width	Max.	Value	Unit		Typ.	Max.	Typ.	Max.	Typ.	Max.	
SPM22224R7MESX	22.50	22.00	13.00	4.70	uH	±20%	1.9	2.2	41,000	40,000	60,000	45,000	100KHz/1V
SPM22226R8MESX				6.80	uH	±20%	2.7	3.2	29,000	28,000	58,000	48,000	100KHz/1V
SPM2222100MESX				10.00	uH	±20%	4.0	4.7	28,000	27,000	47,000	39,000	100KHz/1V
SPM222220MESX				20.00	uH	±20%	9.5	11.5	20,000	19,800	25,500	21,500	100KHz/1V
SPM22221R0MEBX	23.50	22.00	13.00	1.00	uH	±20%	0.8	1.0	70,000	65,000	60,000	54,000	100KHz/1V
SPM22221R5MEBX				1.50	uH	±20%	0.9	1.2	62,000	57,000	52,000	48,000	100KHz/1V
SPM22222R2MEBX				2.20	uH	±20%	1.1	1.3	58,000	52,000	48,000	43,000	100KHz/1V
SPM22223R3MEBX				3.30	uH	±20%	1.5	1.8	49,000	47,000	41,000	37,000	100KHz/1V
SPM22224R7MEBX				4.70	uH	±20%	1.9	2.2	47,000	44,000	38,000	34,000	100KHz/1V
SPM22226R8MEBX				6.80	uH	±20%	2.6	3.1	40,000	36,000	36,000	32,000	100KHz/1V
SPM2222100MEBX				10.00	uH	±20%	3.4	4.2	33,000	30,000	28,000	20,000	100KHz/1V
SPM2222150MEBX				15.00	uH	±20%	5.1	6.1	26,000	23,000	23,000	18,000	100KHz/1V
SPM222220MEBX				22.00	uH	±20%	9.0	11.0	22,000	18,000	15,000	14,000	100KHz/1V
SPM2222330MEBX				33.00	uH	±20%	12.5	15.4	19,000	16,000	12,000	10,500	100KHz/1V
SPM2222470MEBX				47.00	uH	±20%	17.5	20.8	17,000	14,000	12,000	10,000	100KHz/1V
SPM2222680MEBX				68.00	uH	±20%	24.5	29.5	14,000	12,000	12,000	9,000	100KHz/1V
SPM2222820MEBX				82.00	uH	±20%	28.5	34.2	12,000	10,000	9,000	7,700	100KHz/1V
SPM2222101MEBX				100.00	uH	±20%	31.0	40.0	11,000	9,500	9,000	7,500	100KHz/1V

※Saturation current (I<sub>sat</sub>) : the maximum DC current will cause inductance drop approximately 30% from initial value.

※SPM2222\_MEBX : Saturation current (I<sub>sat</sub>) : the maximum DC current will cause inductance drop approximately 40% from initial value.

※Heat rating current (I<sub>dc</sub>) : the maximum DC current will cause temperature rising approximately 40°C.

## Automotive Type Inductor for Molding Inductor (SAM / AIM / ACM Series)

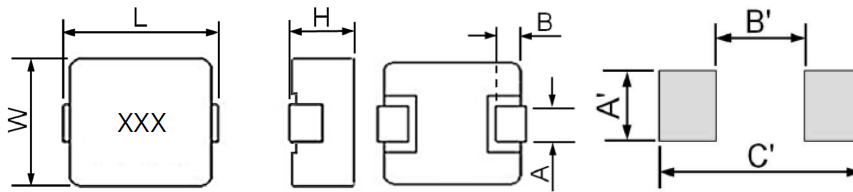
■ **Feature**

1. Magnetic shielded construction
2. Frequency range up to 3.0MHz
3. Higher rated current, capable handling at high current spikes

■ **Standard External Dimensions**

■ **Application**

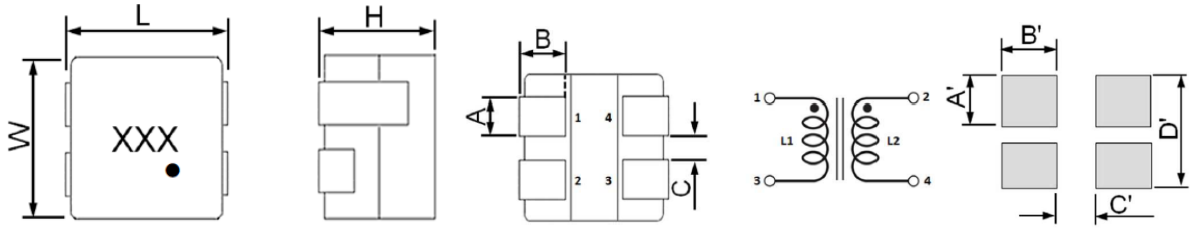
1. VGA card applications
2. DC-DC Converter applications
3. Low profile, high current power supplies
4. Automotive Application



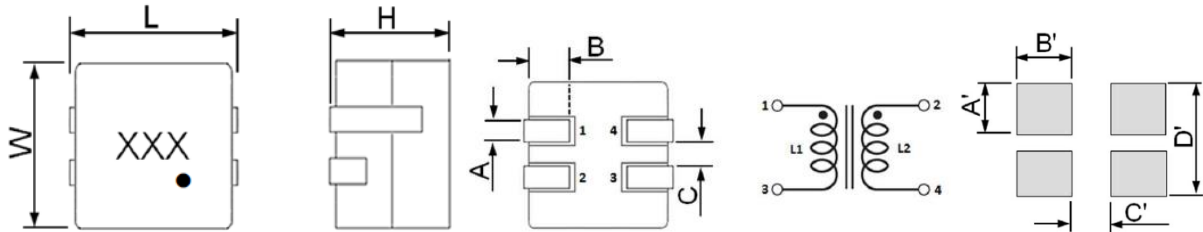
Series	L (mm)	W (mm)	H (mm)	A (mm)	B (mm)	Recommended Land Patterns			Package	
						A' (mm)	B (mm)	C' (mm)	Reel	Amount(pcs)
SAM4040□□□□ESC	4.7±0.3	4.2±0.2	1.0±0.2	2.0±0.3	0.8±0.3	2.5	2.4	5.4	13"	3,500
SAM4040□□□□ELC	4.7±0.3	4.2±0.2	1.0±0.3	2.0±0.3	0.8±0.3	2.5	2.4	5.4	13"	3,500
SAM4040□□□□E_H	4.7±0.3	4.2±0.2	1.8±0.2	2.0±0.3	0.8±0.3	2.5	2.4	5.4	13"	2,000
SAM5050□□□□E_E	5.7±0.3	5.2±0.2	1.3±0.2	2.5±0.3	1.0±0.3	3.5	3.0	7.0	13"	3,000
SAM5050□□□□E_G	5.7±0.3	5.2±0.2	1.6±0.2	2.5±0.3	1.0±0.3	3.5	3.0	7.0	13"	3,000
SAM5050□□□□E_H	5.7±0.3	5.2±0.2	1.8±0.2	2.5±0.3	1.0±0.3	3.5	3.0	7.0	13"	3,000
SAM5050□□□□E_L	5.7±0.3	5.2±0.2	2.8±0.2	2.5±0.3	1.0±0.3	3.5	3.0	7.0	13"	2,000
SAM5050□□□□E_N	5.7±0.3	5.2±0.2	3.8±0.2	2.5±0.3	1.0±0.3	3.5	3.0	7.0	13"	1,500
SAM7070□□□□E_E	7.0±0.3	6.6±0.2	1.3±0.2	3.0±0.5	1.5±0.3	3.5	4.0	8.5	13"	2,000
SAM7070□□□□E_G	7.2±0.3	6.6±0.2	1.6±0.2	3.0±0.5	1.5±0.3	3.5	4.0	8.5	13"	2,000
SAM7070□□□□E_L	7.2±0.3	6.6±0.2	2.8±0.2	3.0±0.5	1.5±0.3	3.5	4.0	8.5	13"	1,500
SAM7070□□□□E_N	7.2±0.3	6.6±0.2	3.8±0.2	3.0±0.5	1.5±0.3	3.5	4.0	8.5	13"	1,000
SAM7070□□□□E_Q	7.2±0.3	6.6±0.2	4.8±0.2	3.0±0.5	1.5±0.3	3.5	4.0	8.5	13"	1,000
SAM8080□□□□E_W	8.7±0.35	8.2±0.3	5.3±0.2	5.1±0.3	1.6±0.3	5.4	4.8	9.6	13"	500
SAM1010□□□□E_N	11.2±0.3	10.0±0.2	3.8±0.2	3.0±0.5	2.0±0.5	4.0	5.5	13.5	13"	800
SAM1010□□□□E_W	11.2±0.3	10.0±0.2	5.3±0.2	3.0±0.5	2.0±0.5	4.0	5.5	13.5	13"	500
SAM1313□□□□E_Q*	13.9±0.3	12.8±0.2	4.8±0.2	5.0±0.5	2.0±0.3	6.0	8.0	14.5	13"	500
SAM1313□□□□E_R	13.9±0.3	12.8±0.2	5.8±0.2	5.0±0.5	2.0±0.3	6.0	8.0	14.5	13"	500
AIM1313□□□□ESN	13.9±0.3	12.8±0.2	3.8±0.2	5.0±0.5	2.0±0.3	6.0	8.0	14.5	13"	500
AIM1313□□□□ESR	13.9±0.3	12.8±0.2	5.8±0.2	5.0±0.5	2.0±0.3	6.0	8.0	14.5	13"	500

\*New Series

For some special parts, please see the "Part Number & Characteristic" for detail specification



Series	L (mm)	W (mm)	H (mm)	A (mm)	B (mm)	C (mm)	Recommended Land Patterns				Package	
							A' (mm)	B' (mm)	C' (mm)	D' (mm)	Reel	Amount (pcs)
ACM7070□□□□ESR	7.7±0.35	7.2±0.3	6.0max	2.3±0.3	1.75±0.35	1.2±0.3	2.8	3.0	3.3	6.4	13"	800
ACM1010□□□□ESY	10.8±0.35	10.0±0.3	8.0max	3.1±0.3	2.4±0.5	1.6±0.2	3.8	4.0	5.0	8.8	13"	400



Series	L (mm)	W (mm)	H (mm)	A (mm)	B (mm)	C (mm)	Recommended Land Patterns				Package	
							A' (mm)	B' (mm)	C' (mm)	D' (mm)	Reel	Amount (pcs)
ACM1313□□□□ESS	12.0±0.3	12.0±0.3	6.5max	1.5±0.4	3.25±0.3	1.65±0.4	2.2	4.0	4.5	5.9	13"	500
ACM1313□□□□ESY	12.0±0.3	12.0±0.3	8.0max	1.5±0.4	3.25±0.3	1.65±0.4	2.2	4.0	4.5	5.9	13"	300
ACM1313□□□□ESV	12.0±0.3	12.0±0.3	8.0Max	1.5±0.4	3.25±0.3	1.65±0.4	2.20	4.50	4.50	5.9	13"	250
ACM1313□□□□ESO	12.0±0.3	12.0±0.3	10.0max	1.5±0.4	3.25±0.3	1.65±0.4	2.2	4.0	4.5	5.9	13"	200

\*New Series

For some special parts, please see the "Part Number & Characteristic" for detail specification

Power Inductors

## ■ Part Number & Characteristic (General Molding for Automotive)(SAM Series)

### ● SAM4040

DARFON P/N	Size		Thickness (mm) Max.	Inductance		Inductance Tolerance %	DC Resistance (mΩ)		Heat Rating Current I <sub>dc</sub> (mA) Max.	Saturation Current I <sub>sat</sub> (mA) Max.	Measuring Condition
	Length	Width		Value	Unit		Typ.	Max.			
SAM4040R33MESC	4.70	4.20	1.20	0.33	uH	±20%	14.0	16.5	6,500	9,000	100KHz/1V
SAM4040R47MESC				0.47	uH	±20%	19.0	21.0	6,000	6,800	100KHz/1V
SAM4040R68MESC				0.68	uH	±20%	32.0	36.0	4,500	6,000	100KHz/1V
SAM40401R0MESC				1.00	uH	±20%	43.0	47.0	4,200	5,200	100KHz/1V
SAM40401R5MESC				1.50	uH	±20%	68.0	75.0	3,250	4,000	100KHz/1V
SAM40402R2MESC				2.20	uH	±20%	79.4	83.5	2,750	3,500	100KHz/1V
SAM40403R3MESC				3.30	uH	±20%	120.0	138.0	2,300	3,000	100KHz/1V
SAM40404R7MESC				4.70	uH	±20%	175.0	195.0	1,800	2,800	100KHz/1V
SAM4040R33MELC	4.70	4.20	1.20	0.33	uH	±20%	14.0	16.5	6,500	9,000	100KHz/1V
SAM4040R47MELC				0.47	uH	±20%	19.0	21.0	6,000	6,800	100KHz/1V
SAM4040R68MELC				0.68	uH	±20%	32.0	36.0	4,500	6,000	100KHz/1V
SAM40401R0MELC				1.00	uH	±20%	43.0	47.0	4,200	5,200	100KHz/1V
SAM40401R5MELC				1.50	uH	±20%	68.0	75.0	3,250	4,000	100KHz/1V
SAM40402R2MELC				2.20	uH	±20%	79.4	83.5	2,750	3,500	100KHz/1V
SAM40403R3MELC				3.30	uH	±20%	120.0	138.0	2,300	3,000	100KHz/1V
SAM40404R7MELC				4.70	uH	±20%	175.0	195.0	1,800	2,800	100KHz/1V
SAM4040R22MESH	4.70	4.20	2.00	0.22	uH	±20%	6.0	6.6	9,000	12,500	100KHz/1V
SAM4040R47MESH				0.47	uH	±20%	12.5	14.0	7,000	9,500	100KHz/1V
SAM4040R68MESH				0.68	uH	±20%	19.4	21.0	5,200	8,000	100KHz/1V
SAM40401R0MESH				1.00	uH	±20%	24.0	27.0	4,800	7,000	100KHz/1V
SAM40401R5MESH				1.50	uH	±20%	36.0	44.0	4,000	6,300	100KHz/1V
SAM40402R2MESH				2.20	uH	±20%	52.0	58.0	3,600	5,900	100KHz/1V
SAM40403R3MESH				3.30	uH	±20%	74.0	87.0	3,000	4,000	100KHz/1V
SAM40404R7MESH				4.70	uH	±20%	88.0	100.0	2,800	3,200	100KHz/1V
SAM40406R8MESH				6.80	uH	±20%	162.0	178.0	2,000	2,100	100KHz/1V
SAM4040100MESH				10.00	uH	±20%	256.0	282.0	1,600	1,800	100KHz/1V
SAM4040R22MELH	4.70	4.20	2.00	0.22	uH	±20%	6.0	6.6	9,000	12,500	100KHz/1V
SAM4040R47MELH				0.47	uH	±20%	12.5	14.0	7,000	9,500	100KHz/1V
SAM4040R68MELH				0.68	uH	±20%	19.4	21.0	5,200	8,000	100KHz/1V
SAM40401R0MELH				1.00	uH	±20%	24.0	27.0	4,800	7,000	100KHz/1V
SAM40401R5MELH				1.50	uH	±20%	36.0	44.0	4,000	6,300	100KHz/1V
SAM40402R2MELH				2.20	uH	±20%	52.0	58.0	3,600	5,900	100KHz/1V
SAM40403R3MELH				3.30	uH	±20%	74.0	87.0	3,000	4,000	100KHz/1V
SAM40404R7MELH				4.70	uH	±20%	88.0	100.0	2,800	3,200	100KHz/1V
SAM40406R8MELH				6.80	uH	±20%	162.0	178.0	2,000	2,100	100KHz/1V
SAM4040100MELH				10.00	uH	±20%	256.0	282.0	1,600	1,800	100KHz/1V

※ Saturation current (I<sub>sat</sub>) : the maximum DC current will cause inductance drop approximately 30% from initial value.

※ Heat rating current (I<sub>dc</sub>) : the maximum DC current will cause temperature rising approximately 40°C.

### ● SAM5050

DARFON P/N	Size		Thickness (mm) Max.	Inductance		Inductance Tolerance %	DC Resistance (mΩ)		Heat Rating Current I <sub>dc</sub> (mA) Max.	Saturation Current I <sub>sat</sub> (mA) Max.	Measuring Condition
	Length	Width		Value	Unit		Typ.	Max.			
SAM50500R22NESE	5.70	5.20	1.50	0.22	uH	±30%	5.8	7.0	10,000	17,000	100KHz/1V
SAM50501R0MESE				1.00	uH	±20%	20.0	23.0	6,500	9,000	100KHz/1V
SAM50501R5MESE				1.50	uH	±20%	46.0	53.0	4,200	7,000	100KHz/1V
SAM50502R2MESE				2.20	uH	±20%	58.0	64.0	3,300	6,000	100KHz/1V
SAM50503R3MESE				3.30	uH	±20%	70.0	80.0	3,200	4,500	100KHz/1V
SAM50504R7MESE				4.70	uH	±20%	103.0	115.0	3,000	4,000	100KHz/1V
SAM50506R8MESE				6.80	uH	±20%	167.0	180.0	2,500	3,200	100KHz/1V
SAM5050100MESE				10.00	uH	±20%	220.0	246.0	2,000	3,000	100KHz/1V
SAM5050R22NELE	5.70	5.20	1.50	0.22	uH	±30%	5.8	7.0	10,000	17,000	100KHz/1V
SAM50501R0MELE				1.00	uH	±20%	20.0	23.0	6,500	9,000	100KHz/1V
SAM50501R5MELE				1.50	uH	±20%	46.0	53.0	4,200	7,000	100KHz/1V
SAM50502R2MELE				2.20	uH	±20%	58.0	64.0	3,300	6,000	100KHz/1V
SAM50503R3MELE				3.30	uH	±20%	70.0	80.0	3,200	4,500	100KHz/1V
SAM50504R7MELE				4.70	uH	±20%	103.0	115.0	3,000	4,000	100KHz/1V
SAM50506R8MELE				6.80	uH	±20%	167.0	180.0	2,500	3,200	100KHz/1V
SAM5050100MELE				10.00	uH	±20%	220.0	246.0	2,000	3,000	100KHz/1V
SAM50501R0MESG	5.70	5.20	1.80	1.00	uH	±20%	15.0	17.0	8,000	9,500	100KHz/1V
SAM50504R7MESG				4.70	uH	±20%	78.0	85.0	3,500	4,000	100KHz/1V
SAM50506R8MESG				6.80	uH	±20%	107.0	120.0	2,800	3,400	100KHz/1V
SAM5050100MESG				10.00	uH	±20%	140.0	155.0	2,500	3,000	100KHz/1V
SAM50501R0MELG	5.70	5.20	1.80	1.00	uH	±20%	15.0	17.0	8,000	9,500	100KHz/1V
SAM50504R7MELG				4.70	uH	±20%	78.0	85.0	3,500	4,000	100KHz/1V

This catalog contains typical product specifications. When you consider using our products, please check our product specification sheets. (Characteristic diagram, reliability information, application notes... etc.) [https://www.darfon.com.tw/Component\\_Integration/en/](https://www.darfon.com.tw/Component_Integration/en/)

DARFON P/N	Size		Thickness (mm) Max.	Inductance		Inductance Tolerance %	DC Resistance (mΩ)		Heat Rating Current I <sub>dc</sub> (mA)		Saturation Current I <sub>sat</sub> (mA)		Measuring Condition
	Length	Width		Value	Unit		Typ.	Max.	Typ.	Max.	Typ.	Max.	
SAM50506R8MELG	5.70	5.20	1.80	6.80	uH	±20%	107.0	120.0	2,800		3,400		100KHz/1V
SAM5050100MELG				10.00	uH	±20%	140.0	155.0	2,500		3,000		100KHz/1V
SAM5050R22MESH	5.70	5.20	2.00	0.22	uH	±20%	4.1	4.5	12,000		20,000		100KHz/1V
SAM5050R24MESH				0.24	uH	±20%	5.0	5.8	11,700		18,500		100KHz/1V
SAM5050R33MESH				0.33	uH	±20%	5.5	5.9	11,500		16,000		100KHz/1V
SAM5050R47MESH				0.47	uH	±20%	8.0	10.0	10,500		15,500		100KHz/1V
SAM5050R56MESH				0.56	uH	±20%	8.2	10.0	10,000		13,000		100KHz/1V
SAM5050R68MESH				0.68	uH	±20%	10.5	13.0	9,500		12,000		100KHz/1V
SAM50501R0MESH				1.00	uH	±20%	15.0	17.0	8,000		9,500		100KHz/1V
SAM50501R2MESH				1.20	uH	±20%	19.5	22.5	7,000		9,000		100KHz/1V
SAM50501R5MESH				1.50	uH	±20%	24.2	27.5	6,000		8,500		100KHz/1V
SAM50502R2MESH				2.20	uH	±20%	30.0	35.0	5,000		6,500		100KHz/1V
SAM50503R3MESH				3.30	uH	±20%	49.0	55.0	4,500		5,500		100KHz/1V
SAM50504R7MESH				4.70	uH	±20%	75.3	81.3	3,500		4,500		100KHz/1V
SAM50505R6MESH				5.60	uH	±20%	85.2	92.0	3,000		4,000		100KHz/1V
SAM50506R8MESH				6.80	uH	±20%	107.0	120.0	2,800		3,600		100KHz/1V
SAM5050100MESH				10.00	uH	±20%	140.0	155.0	2,400		3,400		100KHz/1V
SAM5050R22MELH				5.70	5.20	2.00	0.22	uH	±20%	4.1	4.5	12,000	
SAM5050R24MELH	0.24	uH	±20%				5.0	5.8	11,700		18,500		100KHz/1V
SAM5050R33MELH	0.33	uH	±20%				5.5	5.9	11,500		16,000		100KHz/1V
SAM5050R47MELH	0.47	uH	±20%				8.0	10.0	10,500		15,500		100KHz/1V
SAM5050R56MELH	0.56	uH	±20%				8.2	10.0	10,000		13,000		100KHz/1V
SAM5050R68MELH	0.68	uH	±20%				10.5	13.0	9,500		12,000		100KHz/1V
SAM50501R0MELH	1.00	uH	±20%				15.0	17.0	8,000		9,500		100KHz/1V
SAM50501R2MELH	1.20	uH	±20%				19.5	22.5	7,000		9,000		100KHz/1V
SAM50501R5MELH	1.50	uH	±20%				24.2	27.5	6,000		8,500		100KHz/1V
SAM50502R2MELH	2.20	uH	±20%				30.0	35.0	5,000		6,500		100KHz/1V
SAM50503R3MELH	3.30	uH	±20%				49.0	55.0	4,500		5,500		100KHz/1V
SAM50504R7MELH	4.70	uH	±20%				75.3	81.3	3,500		4,500		100KHz/1V
SAM50505R6MELH	5.60	uH	±20%				85.2	92.0	3,000		4,000		100KHz/1V
SAM50506R8MELH	6.80	uH	±20%				107.0	120.0	2,800		3,600		100KHz/1V
SAM5050100MELH	10.00	uH	±20%				140.0	155.0	2,400		3,400		100KHz/1V
SAM50501R0MESL	5.70	5.20	3.00				1.00	uH	±20%	13.0	14.0	7,000	
SAM50501R5MESL				1.50	uH	±20%	18.0	25.0	6,200		9,500		100KHz/1V
SAM50502R2MESL				2.20	uH	±20%	29.0	35.0	5,500		9,000		100KHz/1V
SAM50503R3MESL				3.30	uH	±20%	32.0	38.0	5,000		7,000		100KHz/1V
SAM50503R6MESL				3.60	uH	±20%	34.0	40.0	4,700		7,000		100KHz/1V
SAM50504R7MESL				4.70	uH	±20%	50.0	60.0	4,400		6,000		100KHz/1V
SAM50506R8MESL				6.80	uH	±20%	75.0	88.5	3,400		3,800		100KHz/1V
SAM5050100MESL				10.00	uH	±20%	95.0	114.0	2,500		3,500		100KHz/1V
SAM5050220MESL				22.00	uH	±20%	230.0	275.0	2,300		2,100		100KHz/1V
SAM50501R0MELL				5.70	5.20	3.00	1.00	uH	±20%	13.0	14.0	7,000	
SAM50501R5MELL	1.50	uH	±20%				18.0	25.0	6,200		9,500		100KHz/1V
SAM50502R2MELL	2.20	uH	±20%				29.0	35.0	5,500		9,000		100KHz/1V
SAM50503R3MELL	3.30	uH	±20%				32.0	38.0	5,000		7,000		100KHz/1V
SAM50503R6MELL	3.60	uH	±20%				34.0	40.0	4,700		7,000		100KHz/1V
SAM50504R7MELL	4.70	uH	±20%				50.0	60.0	4,400		6,000		100KHz/1V
SAM50506R8MELL	6.80	uH	±20%				75.0	88.5	3,400		3,800		100KHz/1V
SAM5050100MELL	10.00	uH	±20%				95.0	114.0	2,500		3,500		100KHz/1V
SAM5050220MELL	22.00	uH	±20%				230.0	275.0	2,300		2,100		100KHz/1V

Power Inductors

DARFON P/N	Size		Thickness (mm) Max.	Inductance		Inductance Tolerance %	DC Resistance (mΩ)		Heat Rating Current I <sub>dc</sub> (mA)		Saturation Current I <sub>sat</sub> (mA)		Measuring Condition
	Length	Width		Value	Unit		Typ.	Max.	Typ.	Max.	Typ.	Max.	
SAM50504R7MESN	5.70	5.20	4.00	4.70	uH	±20%	31.5	38.0	5,100		7,500		100KHz/1V
SAM5050150MESN				15.00	uH	±20%	115.0	130.0	2,800		2,700		100KHz/1V
SAM5050220MESN				22.00	uH	±20%	170.0	190.0	2,500		2,400		100KHz/1V
SAM5050330MESN	5.70	5.20	4.00	33.00	uH	±20%	250.0	290.0	1,900		2,300		100KHz/1V
SAM50504R7MELN				4.70	uH	±20%	31.5	38.0	5,100		7,500		100KHz/1V
SAM5050150MELN				15.00	uH	±20%	115.0	130.0	2,800		2,700		100KHz/1V
SAM5050220MELN				22.00	uH	±20%	170.0	190.0	2,500		2,400		100KHz/1V
SAM5050330METN				33.00	uH	±20%	250.0	290.0	1,900		1,700		2,300

※ Saturation current (I<sub>sat</sub>) : the maximum DC current will cause inductance drop approximately 30% from initial value.

※ Heat rating current (I<sub>dc</sub>) : the maximum DC current will cause temperature rising approximately 40°C.



● **SAM7070**

DARFON P/N	Size		Thickness (mm) Max.	Inductance		Inductance Tolerance %	DC Resistance (mΩ)		Heat Rating Current Idc (mA) Max.	Saturation Current Isat (mA) Max.	Measuring Condition
	Length	Width		Value	Unit		Typ.	Max.			
SAM7070R22MESE	7.00	6.60	1.50	0.22	uH	±20%	5.1	5.8	11,000	22,000	100KHz/1V
SAM7070R33MESE				0.33	uH	±20%	6.8	7.8	10,000	19,500	100KHz/1V
SAM7070R47MESE				0.47	uH	±20%	8.5	9.8	9,500	16,000	100KHz/1V
SAM7070R56MESE				0.56	uH	±20%	9.5	11.0	9,000	14,000	100KHz/1V
SAM7070R68MESE				0.68	uH	±20%	12.5	14.5	8,000	12,000	100KHz/1V
SAM7070R82MESE				0.82	uH	±20%	15.0	17.0	7,000	10,000	100KHz/1V
SAM70701R0MESE				1.00	uH	±20%	18.5	21.0	5,500	9,000	100KHz/1V
SAM70701R2MESE				1.20	uH	±20%	21.0	30.0	5,400	8,500	100KHz/1V
SAM70701R5MESE				1.50	uH	±20%	37.0	42.5	5,000	7,000	100KHz/1V
SAM70702R2MESE				2.20	uH	±20%	41.0	50.0	4,900	6,100	100KHz/1V
SAM70703R3MESE				3.30	uH	±20%	54.0	63.0	3,300	5,500	100KHz/1V
SAM70704R7MESE				4.70	uH	±20%	76.0	85.0	3,000	5,000	100KHz/1V
SAM70706R8MESE				6.80	uH	±20%	125.0	135.0	2,500	4,000	100KHz/1V
SAM7070100MESE				10.00	uH	±20%	165.0	175.0	2,000	3,000	100KHz/1V
SAM7070R22MELE				7.00	6.60	1.50	0.22	uH	±20%	5.1	5.8
SAM7070R33MELE	0.33	uH	±20%				6.8	7.8	10,000	19,500	100KHz/1V
SAM7070R47MELE	0.47	uH	±20%				8.5	9.8	9,500	16,000	100KHz/1V
SAM7070R56MELE	0.56	uH	±20%				9.5	11.0	9,000	14,000	100KHz/1V
SAM7070R68MELE	0.68	uH	±20%				12.5	14.5	8,000	12,000	100KHz/1V
SAM7070R82MELE	0.82	uH	±20%				15.0	17.0	7,000	10,000	100KHz/1V
SAM70701R0MELE	1.00	uH	±20%				18.5	21.0	5,500	9,000	100KHz/1V
SAM70701R2MELE	1.20	uH	±20%				21.0	30.0	5,400	8,500	100KHz/1V
SAM70701R5MELE	1.50	uH	±20%				37.0	42.5	5,000	7,000	100KHz/1V
SAM70702R2MELE	2.20	uH	±20%				41.0	50.0	4,900	6,100	100KHz/1V
SAM70703R3MELE	3.30	uH	±20%				54.0	63.0	3,300	5,500	100KHz/1V
SAM70704R7MELE	4.70	uH	±20%				76.0	85.0	3,000	5,000	100KHz/1V
SAM70706R8MELE	6.80	uH	±20%				125.0	135.0	2,500	4,000	100KHz/1V
SAM7070100MELE	10.00	uH	±20%				165.0	175.0	2,000	3,000	100KHz/1V
SAM7070R10MESG	7.20	6.60	1.80				0.10	uH	±20%	1.9	2.3
SAM7070R22MESG				0.22	uH	±20%	4.5	5.2	14,000	29,000	100KHz/1V
SAM7070R33MESG				0.33	uH	±20%	5.2	6.8	12,000	22,000	100KHz/1V
SAM7070R47MESG				0.47	uH	±20%	7.3	8.4	11,000	17,000	100KHz/1V
SAM7070R68MESG				0.68	uH	±20%	10.8	12.7	9,000	16,000	100KHz/1V
SAM7070R82MESG				0.82	uH	±20%	13.4	15.9	8,000	14,000	100KHz/1V
SAM70701R0MESG				1.00	uH	±20%	14.5	17.0	7,000	12,000	100KHz/1V
SAM70701R5MESG				1.50	uH	±20%	20.0	26.0	6,000	10,000	100KHz/1V
SAM70702R2MESG				2.20	uH	±20%	31.0	35.0	5,000	8,000	100KHz/1V
SAM70703R3MESG				3.30	uH	±20%	56.0	60.0	3,500	7,000	100KHz/1V
SAM70704R7MESG				4.70	uH	±20%	68.0	75.0	3,200	5,500	100KHz/1V
SAM70706R8MESG				6.80	uH	±20%	101.0	110.0	2,800	4,500	100KHz/1V
SAM70708R2MESG				8.20	uH	±20%	124.0	142.0	2,500	4,000	100KHz/1V
SAM7070100MESG				10.00	uH	±20%	155.0	166.0	2,000	3,000	100KHz/1V
SAM7070R10MELG				7.20	6.60	1.80	0.10	uH	±20%	1.9	2.3
SAM7070R22MELG	0.22	uH	±20%				4.5	5.2	14,000	29,000	100KHz/1V
SAM7070R33MELG	0.33	uH	±20%				5.2	6.8	12,000	22,000	100KHz/1V
SAM7070R47MELG	0.47	uH	±20%				7.3	8.4	11,000	17,000	100KHz/1V
SAM7070R68MELG	0.68	uH	±20%				10.8	12.7	9,000	16,000	100KHz/1V
SAM7070R82MELG	0.82	uH	±20%				13.4	15.9	8,000	14,000	100KHz/1V
SAM70701R0MELG	1.00	uH	±20%				14.5	17.0	7,000	12,000	100KHz/1V
SAM70701R5MELG	1.50	uH	±20%				20.0	26.0	6,000	10,000	100KHz/1V
SAM70702R2MELG	2.20	uH	±20%				31.0	35.0	5,000	8,000	100KHz/1V
SAM70703R3MELG	3.30	uH	±20%				56.0	60.0	3,500	7,000	100KHz/1V
SAM70704R7MELG	4.70	uH	±20%				68.0	75.0	3,200	5,500	100KHz/1V
SAM70706R8MELG	6.80	uH	±20%				101.0	110.0	2,800	4,500	100KHz/1V
SAM70708R2MELG	8.20	uH	±20%				124.0	142.0	2,500	4,000	100KHz/1V
SAM7070100MELG	10.00	uH	±20%				155.0	166.0	2,000	3,000	100KHz/1V
SAM7070R10NESL	7.20	6.60	3.00				0.10	uH	±20%	1.5	1.7
SAM7070R15NESL				0.15	uH	±20%	1.5	1.8	24,000	41,000	100KHz/1V
SAM7070R22MESL				0.22	uH	±20%	2.5	2.8	23,000	34,000	100KHz/1V
SAM7070R33MESL				0.33	uH	±20%	3.0	3.5	21,000	25,000	100KHz/1V
SAM7070R47MESL				0.47	uH	±20%	3.5	4.1	18,000	20,000	100KHz/1V
SAM7070R56MESL				0.56	uH	±20%	3.9	4.5	16,500	18,000	100KHz/1V
SAM7070R68MESL				0.68	uH	±20%	4.5	5.0	16,000	17,000	100KHz/1V
SAM7070R82MESL				0.82	uH	±20%	7.0	7.5	14,000	16,000	100KHz/1V
SAM70701R0MESL				1.00	uH	±20%	8.5	9.0	12,000	15,000	100KHz/1V
SAM70701R5MESL				1.50	uH	±20%	10.6	12.1	10,000	13,000	100KHz/1V
SAM70702R2MESL				2.20	uH	±20%	15.5	18.0	8,000	10,000	100KHz/1V
SAM70703R3MESL				3.30	uH	±20%	25.0	28.0	6,500	9,000	100KHz/1V
SAM70704R7MESL				4.70	uH	±20%	32.5	35.0	5,500	6,500	100KHz/1V

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DARFON P/N	Size		Thickness (mm) Max.	Inductance		Inductance Tolerance %	DC Resistance (mΩ)		Heat Rating Current I <sub>dc</sub> (mA) Max.	Saturation Current I <sub>sat</sub> (mA) Max.	Measuring Condition			
	Length	Width		Value	Unit		Typ.	Max.						
SAM70705R6MESL	7.20	6.60	3.00	5.60	uH	±20%	36.0	42.0	5,000	6,250	100KHz/1V			
SAM70706R8MESL				6.80	uH	±20%	43.9	50.0	4,500	6,000	100KHz/1V			
SAM70708R2MESL				8.20	uH	±20%	54.0	60.0	4,500	6,000	100KHz/1V			
SAM7070100MESL				10.00	uH	±20%	62.0	68.0	4,000	5,500	100KHz/1V			
SAM7070150MESL				15.00	uH	±20%	105.0	125.0	3,000	4,000	100KHz/1V			
SAM7070220MESL				22.00	uH	±20%	144.0	160.0	2,500	3,000	100KHz/1V			
SAM7070330MESL				33.00	uH	±20%	230.0	255.0	2,000	3,300	100KHz/1V			
SAM7070470MESL				47.00	uH	±20%	285.0	320.0	1,750	2,450	100KHz/1V			
SAM7070R10NELL				7.20	6.60	3.00	0.10	uH	±20%	1.5	1.7	32,500	60,000	100KHz/1V
SAM7070R15NELL	0.15	uH	±20%				1.5	1.8	24,000	41,000	100KHz/1V			
SAM7070R22MELL	0.22	uH	±20%				2.5	2.8	23,000	34,000	100KHz/1V			
SAM7070R33MELL	0.33	uH	±20%				3.0	3.5	21,000	25,000	100KHz/1V			
SAM7070R47MELL	0.47	uH	±20%				3.5	4.1	18,000	20,000	100KHz/1V			
SAM7070R56MELL	0.56	uH	±20%				3.9	4.5	16,500	18,000	100KHz/1V			
SAM7070R68MELL	0.68	uH	±20%				4.5	5.0	16,000	17,000	100KHz/1V			
SAM7070R82MELL	0.82	uH	±20%				7.0	7.5	14,000	16,000	100KHz/1V			
SAM70701R0MELL	1.00	uH	±20%				8.5	9.0	12,000	15,000	100KHz/1V			
SAM70701R5MELL	1.50	uH	±20%				10.6	12.1	10,000	13,000	100KHz/1V			
SAM70702R2MELL	2.20	uH	±20%				15.5	18.0	8,000	10,000	100KHz/1V			
SAM70703R3MELL	3.30	uH	±20%				25.0	28.0	6,500	9,000	100KHz/1V			
SAM70704R7MELL	4.70	uH	±20%				32.5	35.0	5,500	6,500	100KHz/1V			
SAM70705R6MELL	5.60	uH	±20%				36.0	42.0	5,000	6,250	100KHz/1V			
SAM70706R8MELL	6.80	uH	±20%				43.9	50.0	4,500	6,000	100KHz/1V			
SAM70708R2MELL	8.20	uH	±20%				54.0	60.0	4,500	6,000	100KHz/1V			
SAM7070100MELL	10.00	uH	±20%				62.0	68.0	4,000	5,500	100KHz/1V			
SAM7070150MELL	15.00	uH	±20%				105.0	125.0	3,000	4,000	100KHz/1V			
SAM7070220MELL	22.00	uH	±20%				144.0	160.0	2,500	3,000	100KHz/1V			
SAM7070330MELL	33.00	uH	±20%				230.0	255.0	2,000	3,300	100KHz/1V			
SAM7070470MELL	47.00	uH	±20%				285.0	320.0	1,750	2,450	100KHz/1V			
SAM70706R8MESN	7.20	6.60	4.00				6.80	uH	±20%	38.0	46.0	4,700	7,500	100KHz/1V
SAM7070330MESN	7.20	6.60	4.00				33.00	uH	±20%	190.0	228.0	2,500	3,000	100KHz/1V
SAM70706R8MELN							6.80	uH	±20%	38.0	46.0	4,700	7,500	100KHz/1V
SAM7070330MELN	33.00	uH	±20%	190.0	228.0	2,500	3,000	100KHz/1V						
SAM7070R36MESQ	7.20	6.60	5.00	0.36	uH	±20%	2.7	3.1	21,000	25,000	100KHz/1V			
SAM7070R68MESQ				0.68	uH	±20%	3.3	3.6	18,000	17,000	100KHz/1V			
SAM70701R0MESQ				1.00	uH	±20%	4.5	5.3	14,500	16,000	100KHz/1V			
SAM70701R5MESQ				1.50	uH	±20%	6.0	7.5	11,500	15,000	100KHz/1V			
SAM70702R2MESQ				2.20	uH	±20%	9.0	10.5	10,500	13,500	100KHz/1V			
SAM70703R3MESQ				3.30	uH	±20%	14.0	15.0	9,000	10,000	100KHz/1V			
SAM70704R7MESQ				4.70	uH	±20%	23.0	25.0	6,500	8,000	100KHz/1V			
SAM70706R8MESQ				6.80	uH	±20%	31.5	35.5	5,500	6,500	100KHz/1V			
SAM7070100MESQ				10.00	uH	±20%	42.0	50.0	4,500	5,000	100KHz/1V			
SAM7070150MESQ				15.00	uH	±20%	76.0	85.0	3,800	4,600	100KHz/1V			
SAM7070220MESQ				22.00	uH	±20%	105.0	120.0	3,000	3,700	100KHz/1V			
SAM7070330MESQ				33.00	uH	±20%	130.0	145.0	2,800	3,200	100KHz/1V			
SAM7070470MESQ				47.00	uH	±20%	162.0	178.0	2,300	2,500	100KHz/1V			
SAM7070560MESQ				56.00	uH	±20%	235.0	290.0	1,800	2,200	100KHz/1V			
SAM7070680MESQ				68.00	uH	±20%	280.0	320.0	1,700	2,400	100KHz/1V			
SAM7070R36MELQ				7.20	6.60	5.00	0.36	uH	±20%	2.7	3.1	21,000	25,000	100KHz/1V
SAM7070R68MELQ	0.68	uH	±20%				3.3	3.6	18,000	17,000	100KHz/1V			
SAM70701R0MELQ	1.00	uH	±20%				4.5	5.3	14,500	16,000	100KHz/1V			
SAM70701R5MELQ	1.50	uH	±20%				6.0	7.5	11,500	15,000	100KHz/1V			
SAM70702R2MELQ	2.20	uH	±20%				9.0	10.5	10,500	13,500	100KHz/1V			
SAM70703R3MELQ	3.30	uH	±20%				14.0	15.0	9,000	10,000	100KHz/1V			
SAM70704R7MELQ	4.70	uH	±20%				23.0	25.0	6,500	8,000	100KHz/1V			
SAM70706R8MELQ	6.80	uH	±20%				31.5	35.5	5,500	6,500	100KHz/1V			
SAM7070100MELQ	10.00	uH	±20%				42.0	50.0	4,500	5,000	100KHz/1V			
SAM7070150MELQ	15.00	uH	±20%				76.0	85.0	3,800	4,600	100KHz/1V			
SAM7070220MELQ	22.00	uH	±20%				105.0	120.0	3,000	3,700	100KHz/1V			
SAM7070330MELQ	33.00	uH	±20%				130.0	145.0	2,800	3,200	100KHz/1V			
SAM7070470MELQ	47.00	uH	±20%				162.0	178.0	2,300	2,500	100KHz/1V			
SAM7070560MELQ	56.00	uH	±20%				235.0	290.0	1,800	2,200	100KHz/1V			
SAM7070680MELQ	68.00	uH	±20%				280.0	320.0	1,700	2,400	100KHz/1V			

- ※ Saturation current (I<sub>sat</sub>) : the maximum DC current will cause inductance drop approximately 30% from initial value.
- ※ SAM7070\_ELL、SAM7070\_ELN、SAM7070\_ELQ : Saturation current (I<sub>sat</sub>) : the maximum DC current will cause inductance drop approximately 40% from initial value.
- ※ Heat rating current (I<sub>dc</sub>) : the maximum DC current will cause temperature rising approximately 40°C.

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## ● SAM8080

DARFON P/N	Size		Thickness (mm)	Inductance		Inductance Tolerance %	DC Resistance (mΩ)		Heat Rating Current I <sub>dc</sub> (mA)		Saturation Current I <sub>sat</sub> (mA)		Measuring Condition
	Length	Width		Max.	Value		Unit	Typ.	Max.	Typ.	Max.	Typ.	
SAM80802R2MESW	8.70	8.20	5.50	2.20	uH	±20%	6.0	7.2	14,000	13,500	16,700	14,300	100KHz/1V
SAM80804R7MESW				4.70	uH	±20%	12.3	15.0	8,900	8,000	13,500	11,500	100KHz/1V
SAM80806R8MESW				6.80	uH	±20%	20.0	24.0	6,800	6,500	11,500	9,500	100KHz/1V
SAM8080100MESW				10.0	uH	±20%	32.0	36.0	6,100	5,900	8,800	7,300	100KHz/1V
SAM8080150MESW				15.0	uH	±20%	44.0	52.8	4,900	4,400	6,300	5,100	100KHz/1V
SAM8080220MESW				22.00	uH	±20%	56.0	67.0	4,300	4,200	6,200	5,200	100KHz/1V
SAM8080330MESW				33.00	uH	±20%	100.0	115.0	3,600	3,400	5,300	4,300	100KHz/1V
SAM8080101MESW				100.00	uH	±20%	285.0	315.0	2,000	1,900	2,900	2,400	100KHz/1V
SAM80802R2MELW	8.70	8.20	5.50	2.20	uH	±20%	6.0	7.2	14,000	13,500	16,700	14,300	100KHz/1V
SAM80804R7MELW				4.70	uH	±20%	12.3	15.0	8,900	8,000	13,500	11,500	100KHz/1V
SAM80806R8MELW				6.80	uH	±20%	20.0	24.0	6,800	6,500	11,500	9,500	100KHz/1V
SAM8080100MELW				10.00	uH	±20%	32.0	36.0	6,100	5,900	8,800	7,300	100KHz/1V
SAM8080150MELW				15.00	uH	±20%	44.0	52.8	4,900	4,400	6,300	5,100	100KHz/1V
SAM8080220MELW				22.00	uH	±20%	56.0	67.0	4,300	4,200	6,200	5,200	100KHz/1V
SAM8080330MELW				33.00	uH	±20%	110.0	115.0	3,600	3,400	5,300	4,300	100KHz/1V
SAM8080101MELW				100.00	uH	±20%	285.0	315.0	2,000	1,900	2,900	2,400	100KHz/1V

- ※ Saturation current (I<sub>sat</sub>) : the maximum DC current will cause inductance drop approximately 30% from initial value.
- ※ SAM8080\_ELW : Saturation current (I<sub>sat</sub>) : the maximum DC current will cause inductance drop approximately 40% from initial value.
- ※ Heat rating current (I<sub>dc</sub>) : the maximum DC current will cause temperature rising approximately 40°C.

## ● SAM1010

DARFON P/N	Size		Thickness (mm)	Inductance		Inductance Tolerance %	DC Resistance (mΩ)		Heat Rating Current I <sub>dc</sub> (mA)		Saturation Current I <sub>sat</sub> (mA)		Measuring Condition			
	Length	Width		Max.	Value		Unit	Typ.	Max.	Typ.	Max.	Typ.		Max.		
SAM1010R47METN	11.20	10.00	4.00	0.47	uH	±20%	2.5	3.0	--	21,000	--	35,000	100KHz/1V			
SAM1010R68METN				0.68	uH	±20%	3.0	3.3	--	18,000	--	29,000	100KHz/1V			
SAM10101R0METN				1.00	uH	±20%	3.3	3.6	--	17,000	--	28,000	100KHz/1V			
SAM10101R2METN				1.20	uH	±20%	4.5	5.4	--	16,000	--	22,000	100KHz/1V			
SAM10101R5METN				1.50	uH	±20%	4.7	5.6	--	15,000	--	21,000	100KHz/1V			
SAM10102R2MESN	11.20	10.00	4.00	2.20	uH	±20%	6.0	7.0	--	12,000	--	18,000	100KHz/1V			
SAM10103R3MESN				3.30	uH	±20%	10.8	11.8	--	10,000	--	16,000	100KHz/1V			
SAM10104R7MESN				4.70	uH	±20%	17.0	20.0	--	8,500	--	15,000	100KHz/1V			
SAM10105R6MESN				5.60	uH	±20%	20.0	23.0	--	8,000	--	14,000	100KHz/1V			
SAM10106R8MESN				6.80	uH	±20%	22.5	25.0	--	7,000	--	12,000	100KHz/1V			
SAM10108R2MESN				8.20	uH	±20%	25.0	27.0	--	6,500	--	9,000	100KHz/1V			
SAM1010100MESN				10.00	uH	±20%	27.0	30.0	--	6,500	--	8,500	100KHz/1V			
SAM1010150MESN				15.00	uH	±20%	40.0	45.0	--	6,300	--	7,000	100KHz/1V			
SAM1010220MESN				22.00	uH	±20%	60.0	66.0	--	5,000	--	5,500	100KHz/1V			
SAM1010330MESN				33.00	uH	±20%	85.0	92.0	--	4,000	--	4,500	100KHz/1V			
SAM1010470MESN				47.00	uH	±20%	130.0	145.0	--	3,300	--	3,500	100KHz/1V			
SAM1010680MESN				68.00	uH	±20%	178.0	195.0	--	2,300	--	3,000	100KHz/1V			
SAM1010101MESN				100.00	uH	±20%	240.0	288.0	--	2,200	--	2,500	100KHz/1V			
SAM1010R47MELN				11.20	10.00	4.00	0.47	uH	±20%	2.5	3.0	--	21,000	--	35,000	100KHz/1V
SAM1010R68MELN							0.68	uH	±20%	3.0	3.3	--	18,000	--	29,000	100KHz/1V
SAM10101R0MELN	1.00	uH	±20%				3.3	3.6	--	17,000	--	28,000	100KHz/1V			
SAM10101R2MELN	1.20	uH	±20%				4.5	5.4	--	16,000	--	22,000	100KHz/1V			
SAM10101R5MELN	1.50	uH	±20%				4.7	5.6	--	15,000	--	21,000	100KHz/1V			
SAM10102R2MELN	2.20	uH	±20%				6.0	7.0	--	12,000	--	18,000	100KHz/1V			
SAM10103R3MELN	3.30	uH	±20%				10.8	11.8	--	10,000	--	16,000	100KHz/1V			
SAM10104R7MELN	4.70	uH	±20%				17.0	20.0	--	8,500	--	15,000	100KHz/1V			
SAM10105R6MELN	5.60	uH	±20%				20.0	23.0	--	8,000	--	14,000	100KHz/1V			
SAM10106R8MELN	6.80	uH	±20%				22.5	25.0	--	7,000	--	12,000	100KHz/1V			
SAM10108R2MELN	8.20	uH	±20%				25.0	27.0	--	6,500	--	9,000	100KHz/1V			
SAM1010100MELN	10.00	uH	±20%				27.0	30.0	--	6,500	--	8,500	100KHz/1V			
SAM1010150MELN	15.00	uH	±20%				40.0	45.0	--	6,300	--	7,000	100KHz/1V			
SAM1010220MELN	22.00	uH	±20%				60.0	66.0	--	5,000	--	5,500	100KHz/1V			
SAM1010330MELN	33.00	uH	±20%				85.0	92.0	--	4,000	--	4,500	100KHz/1V			
SAM1010470MELN	47.00	uH	±20%				130.0	145.0	--	3,300	--	3,500	100KHz/1V			
SAM1010680MELN	68.00	uH	±20%				178.0	195.0	--	2,300	--	3,000	100KHz/1V			
SAM1010101MELN	100.00	uH	±20%				240.0	288.0	--	2,200	--	2,500	100KHz/1V			
SAM10106R8MESW	11.20	10.00	5.50				6.80	uH	±20%	13.0	17.0	9,600	9,500	16,500	13,500	100KHz/1V
SAM1010100MESW							10.00	uH	±20%	21.0	24.2	8,700	7,800	13,000	11,000	100KHz/1V
SAM1010150MESW							15.00	uH	±20%	30.0	33.5	6,700	6,400	9,700	8,200	100KHz/1V
SAM1010220MESW							22.00	uH	±20%	47.0	53.0	6,000	5,400	8,800	7,200	100KHz/1V
SAM1010330MESW							33.00	uH	±20%	67.0	77.1	4,500	4,200	6,200	5,200	100KHz/1V

This catalog contains typical product specifications. When you consider using our products, please check our product specification sheets. (Characteristic diagram, reliability information, application notes... etc.) [https://www.darfon.com.tw/Component\\_Integration/en/](https://www.darfon.com.tw/Component_Integration/en/)

DARFON P/N	Size		Thickness (mm)	Inductance		Inductance Tolerance %	DC Resistance (mΩ)		Heat Rating Current I <sub>dc</sub> (mA)		Saturation Current I <sub>sat</sub> (mA)		Measuring Condition
	Length	Width		Max.	Value		Unit	Typ.	Max.	Typ.	Max.	Typ.	
SAM1010470MESW	11.20	10.00	5.50	47.00	uH	±20%	98.0	114.0	4,100	3,600	4,900	4,200	100KHz/1V
SAM1010680MESW				68.00	uH	±20%	132.0	152.0	3,300	3,000	4,800	4,000	100KHz/1V
SAM1010101MESW				100.00	uH	±20%	200.0	230.0	2,800	2,500	3,600	3,000	100KHz/1V
SAM10106R8MELW	11.20	10.00	5.50	6.80	uH	±20%	13.0	17.0	9,600	9,500	16,500	13,500	100KHz/1V
SAM1010100MELW				10.00	uH	±20%	21.0	24.2	8,700	7,800	13,000	11,000	100KHz/1V
SAM1010150MELW				15.00	uH	±20%	30.0	33.5	6,700	6,400	9,700	8,200	100KHz/1V
SAM1010220MELW				22.00	uH	±20%	47.0	53.0	6,000	5,400	8,800	7,200	100KHz/1V
SAM1010330MELW				33.00	uH	±20%	67.0	77.1	4,500	4,200	6,200	5,200	100KHz/1V
SAM1010470MELW				47.00	uH	±20%	98.0	114.0	4,100	3,600	4,900	4,200	100KHz/1V
SAM1010101MELW				100.00	uH	±20%	200.0	230.0	2,800	2,500	3,600	3,000	100KHz/1V

- ※ Saturation current (I<sub>sat</sub>) : the maximum DC current will cause inductance drop approximately 30% from initial value.
- ※ SAM1010\_ELN · SAM1010\_ELW : Saturation current (I<sub>sat</sub>) : the maximum DC current will cause inductance drop approximately 40% from initial value.
- ※ Heat rating current (I<sub>dc</sub>) : the maximum DC current will cause temperature rising approximately 40°C.

## ● SAM1313

DARFON P/N	Size		Thickness (mm)	Inductance		Inductance Tolerance %	DC Resistance (mΩ)		Heat Rating Current I <sub>dc</sub> (mA)	Saturation Current I <sub>sat</sub> (mA)	Measuring Condition
	Length	Width		Max.	Value		Unit	Typ.			
SAM1313R68METQ	13.90	12.8	5.00	0.68	uH	±20%	2.5	3.0	23,000	38,000	100KHz/1V
SAM13131R0METQ				1.00	uH	±20%	3.0	3.6	22,000	28,000	100KHz/1V
SAM13131R5METQ				1.50	uH	±20%	3.5	4.2	18,500	23,000	100KHz/1V
SAM13132R2MESQ	13.90	12.80	5.00	2.20	uH	±20%	4.0	5.0	15,000	24,000	100KHz/1V
SAM13133R3MESQ				3.30	uH	±20%	5.9	7.0	14,000	22,000	100KHz/1V
SAM13134R7MESQ				4.70	uH	±20%	8.5	10.5	13,000	19,000	100KHz/1V
SAM13136R8MESQ				6.80	uH	±20%	13.0	15.5	12,000	14,000	100KHz/1V
SAM1313100MESQ				10.00	uH	±20%	19.0	22.0	9,000	12,000	100KHz/1V
SAM1313150MESQ				15.00	uH	±20%	26.0	31.0	5,900	8,400	100KHz/1V
SAM1313220MESQ				22.00	uH	±20%	51.0	58.0	4,500	6,500	100KHz/1V
SAM13132R2MESR	13.90	12.80	6.00	2.20	uH	±20%	3.8	4.1	21,000	25,000	100KHz/1V
SAM13133R3MESR				3.30	uH	±20%	5.3	6.4	17,000	22,000	100KHz/1V
SAM13134R7MESR				4.70	uH	±20%	7.2	9.0	16,000	18,000	100KHz/1V
SAM13136R8MESR				6.80	uH	±20%	9.5	12.0	12,000	15,000	100KHz/1V
SAM13138R2MESR				8.20	uH	±20%	13.6	16.0	11,000	13,500	100KHz/1V
SAM1313100MESR				10.00	uH	±20%	18.0	20.7	10,000	12,500	100KHz/1V
SAM1313120MESR				12.00	uH	±20%	20.0	23.0	7,000	10,000	100KHz/1V
SAM1313150MESR				15.00	uH	±20%	25.0	29.0	6,000	9,000	100KHz/1V
SAM1313220MESR				22.00	uH	±20%	34.0	39.5	5,000	7,500	100KHz/1V
SAM1313270MESR				27.00	uH	±20%	49.0	56.0	4,500	6,500	100KHz/1V
SAM1313330MESR				33.00	uH	±20%	65.0	75.0	4,000	6,000	100KHz/1V
SAM1313470MESR				47.00	uH	±20%	80.0	90.0	3,500	5,500	100KHz/1V
SAM1313680MESR				68.00	uH	±20%	120.0	140.0	3,000	4,500	100KHz/1V
SAM1313101MESR				100.00	uH	±20%	180.0	200.0	2,500	3,500	100KHz/1V
SAM1313121MESR				120.00	uH	±20%	185.0	220.0	2,900	3,700	100KHz/1V
SAM1313151MESR				150.00	uH	±20%	250.0	300.0	2,200	2,700	100KHz/1V
SAM13133R3MELR				13.90	12.80	6.00	3.30	uH	±20%	5.3	6.4
SAM13134R7MELR	4.70	uH	±20%				7.2	9.0	16,000	18,000	100KHz/1V
SAM13136R8MELR	6.80	uH	±20%				9.5	12.0	12,000	15,000	100KHz/1V
SAM13138R2MELR	8.20	uH	±20%				13.6	16.0	11,000	13,500	100KHz/1V
SAM1313100MELR	10.00	uH	±20%				18.0	20.7	10,000	12,500	100KHz/1V
SAM1313120MELR	12.00	uH	±20%				20.0	23.0	7,000	10,000	100KHz/1V
SAM1313150MELR	15.00	uH	±20%				25.0	29.0	6,000	9,000	100KHz/1V
SAM1313220MELR	22.00	uH	±20%				34.0	39.5	5,000	7,500	100KHz/1V
SAM1313270MELR	27.00	uH	±20%				49.0	56.0	4,500	6,500	100KHz/1V
SAM1313330MELR	33.00	uH	±20%				65.0	75.0	4,000	6,000	100KHz/1V
SAM1313470MELR	47.00	uH	±20%				80.0	90.0	3,500	5,500	100KHz/1V
SAM1313680MELR	68.00	uH	±20%				120.0	140.0	3,000	4,500	100KHz/1V
SAM1313101MELR	100.00	uH	±20%				180.0	200.0	2,500	3,500	100KHz/1V
SAM1313121MELR	120.00	uH	±20%				185.0	220.0	2,900	3,700	100KHz/1V
SAM1313151MELR	150.00	uH	±20%				250.0	300.0	2,200	2,700	100KHz/1V

- ※ Saturation current (I<sub>sat</sub>) : the maximum DC current will cause inductance drop approximately 30% from initial value.
- ※ SAM1313\_ELR : Saturation current (I<sub>sat</sub>) : the maximum DC current will cause inductance drop approximately 40% from initial value.
- ※ Heat rating current (I<sub>dc</sub>) : the maximum DC current will cause temperature rising approximately 40°C.

## ■ Part Number & Characteristic (High Efficiency Molding for Automotive) (AIM Series)

### ● AIM1313

DARFON P/N	Size		Thickness (mm) Max.	Inductance		Inductance Tolerance %	DC Resistance (mΩ)		Heat Rating Current I <sub>dc</sub> (mA)		Saturation Current I <sub>sat</sub> (mA)		Measuring Condition
	Length	Width		Value	Unit		Typ.	Max.	Typ.	Max.	Typ.	Max.	
AIM1313220MESN	13.90	12.80	4.00	22.00	uH	±20%	42.5	52.5	6,100	6,000	9,500	7,500	100KHz/1V
AIM1313330MESN				33.00	uH	±20%	63.0	73.0	5,100	5,000	7,300	6,000	100KHz/1V
AIM1313101MESN				100.00	uH	±20%	215.0	230.0	2,600	2,400	3,800	3,100	100KHz/1V
AIM1313220MESR	13.90	12.80	6.00	22.00	uH	±20%	29.0	34.0	7,700	7,200	11,000	9,500	100KHz/1V
AIM1313330MESR				33.00	uH	±20%	43.0	51.0	6,500	6,000	9,000	7,500	100KHz/1V
AIM1313470MESR				47.00	uH	±20%	60.0	70.0	5,300	4,800	7,800	6,500	100KHz/1V
AIM1313101MESR				100.00	uH	±20%	130.0	155.0	3,700	3,500	5,300	4,500	100KHz/1V

※Saturation current (I<sub>sat</sub>) : the maximum DC current will cause inductance drop approximately 30% from initial value.

※Heat rating current (I<sub>dc</sub>) : the maximum DC current will cause temperature rising approximately 40°C.

## ■ Part Number & Characteristic (Double Molding for Automotive) (ACM Series)

### ● ACM7070

DARFON P/N	Size		Thickness (mm) Max.	Inductance		Inductance Tolerance %	DC Resistance (mΩ)		Heat Rating Current I <sub>dc</sub> (mA)		Saturation Current I <sub>sat</sub> (mA)		Measuring Condition
	Length	Width		Value	Unit		Typ.	Max.	Typ.	Max.	Typ.	Max.	
ACM70704R7MESR	7.70	7.20	6.00	4.70	uH	±20%	29.0	35.0	4,900	4,800	11,500	9,500	100KHz/1V
ACM7070100MESR				10.0	uH	±20%	60.0	72.0	3,800	3,500	7,000	5,800	100KHz/1V
ACM7070150MESR				15.0	uH	±20%	75.0	90.0	3,700	3,400	6,000	5,100	100KHz/1V
ACM7070220MESR				22.0	uH	±20%	112.0	134.0	2,600	2,400	4,800	4,000	100KHz/1V
ACM7070330MESR				33.0	uH	±20%	180.0	210.0	2,400	2,300	4,600	3,600	100KHz/1V

※Saturation current (I<sub>sat</sub>) : the maximum DC current will cause inductance drop approximately 30% from initial value.

※Heat rating current (I<sub>dc</sub>) : the maximum DC current will cause temperature rising approximately 40°C.

### ● ACM1010

DARFON P/N	Size		Thickness (mm) Max.	Inductance		Inductance Tolerance %	DC Resistance (mΩ)		Heat Rating Current I <sub>dc</sub> (mA)		Saturation Current I <sub>sat</sub> (mA)		Measuring Condition
	Length	Width		Value	Unit		Typ.	Max.	Typ.	Max.	Typ.	Max.	
ACM1010100MESY	10.80	10.0	8.00	10.0	uH	±20%	23.0	27.0	6,800	6,600	11,500	9,400	100KHz/1V
ACM1010150MESY				15.0	uH	±20%	34.0	40.8	6,000	5,800	9,200	7,800	100KHz/1V
ACM1010220MESY				22.0	uH	±20%	54.0	63.0	4,700	4,600	9,000	7,500	100KHz/1V
ACM1010470MESY				47.0	uH	±20%	108.0	129.6	3,300	3,100	5,800	4,900	100KHz/1V

※Saturation current (I<sub>sat</sub>) : the maximum DC current will cause inductance drop approximately 30% from initial value.

※Heat rating current (I<sub>dc</sub>) : the maximum DC current will cause temperature rising approximately 40°C.

### ● ACM1313

DARFON P/N	Size		Thickness (mm) Max.	Inductance		Inductance Tolerance %	DC Resistance (mΩ)		Heat Rating Current I <sub>dc</sub> (mA)		Saturation Current I <sub>sat</sub> (mA)		Measuring Condition
	Length	Width		Value	Unit		Typ.	Max.	Typ.	Max.	Typ.	Max.	
ACM1313100MESS	12.00	12.00	6.50	10.0	uH	±20%	25.0	30.0	7,200	7,000	11,000	9,000	100KHz/1V
ACM1313220MESS				22.0	uH	±20%	37.5	45.0	5,800	5,500	9,200	7,800	100KHz/1V
ACM1313330MESS				33.0	uH	±20%	55.0	64.0	4,750	4,500	8,200	6,700	100KHz/1V
ACM1313100MESY	12.00	12.00	8.00	10.0	uH	±20%	85.0	95.0	3,900	3,700	5,800	4,700	100KHz/1V
ACM1313150MESY				15.0	uH	±20%	20.0	24.0	7,700	7,500	12,500	10,500	100KHz/1V
ACM1313220MESV	12.00	12.00	9.00	22.00	uH	±20%	30.0	35.0	6,900	6,600	10,200	8,400	100KHz/1V
ACM1313330MESV				33.00	uH	±20%	37.5	45.0	6,400	6,200	9,200	7,700	100KHz/1V
ACM1313220MESO	12.00	12.00	10.00	22.0	uH	±20%	56.0	67.0	5,100	4,900	7,600	6,400	100KHz/1V
ACM1313330MESO				33.0	uH	±20%	33.0	40.0	6,600	6,500	8,800	7,400	100KHz/1V

※Saturation current (I<sub>sat</sub>) : the maximum DC current will cause inductance drop approximately 30% from initial value.

※Heat rating current (I<sub>dc</sub>) : the maximum DC current will cause temperature rising approximately 40°C.

## Coating Inductors (SPS / SPN Series)

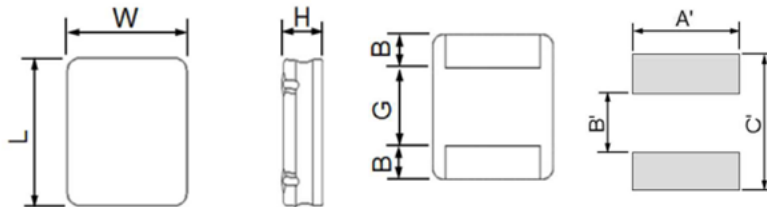
### ■ Feature

1. Small and low profile inductor
2. It corresponds to high current
3. Simple and original magnetic shield structure

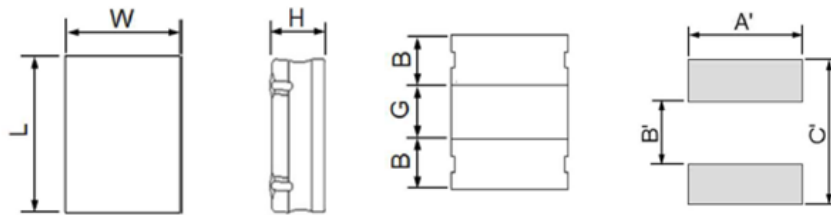
### ■ Application

For small DC/DC converter (HDD, DVC, DSC, LCD display, notebook, tablet, Bluetooth earphone, cellular phones)

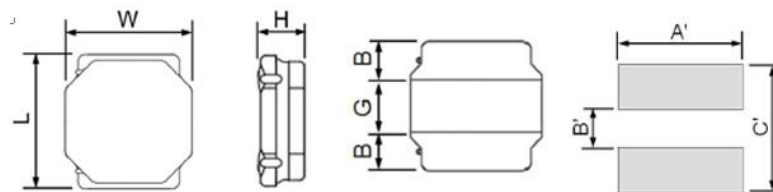
### ■ External Dimension



Series	L (mm)	W (mm)	H (mm)	B (mm)	G (mm)	Recommended Land Patterns			Package	
						A' (mm)	B' (mm)	C' (mm)	Reel	Amount (pcs)
SPS2016□□□□PCA	2.0±0.3	1.6±0.3	1.0+0.1/-0.2	0.6±0.2	0.8±0.3	1.6	0.6	2.4	7"	3,000
SPS2520□□□□PCA	2.5±0.3	2.0±0.3	1.0+0.1/-0.2	0.85±0.2	0.95±0.3	2.2	0.6	2.6	7"	3,000

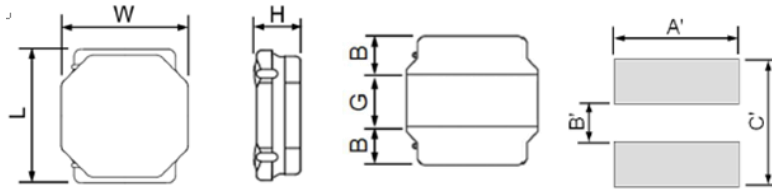


Series	L (mm)	W (mm)	H (mm)	B (mm)	G (mm)	Recommended Land Patterns			Package	
						A' (mm)	B' (mm)	C' (mm)	Reel	Amount (pcs)
SPS2520□□□□PCC	2.5±0.3	2.0±0.3	1.2+0.1/-0.2	0.85±0.2	0.8±0.3	2.1	0.8	2.6	7"	3,000
SPN2016□□□□PSA	2.0±0.3	1.6±0.3	1.0+0.1/-0.2	0.77±0.2	0.6±0.3	1.6	0.3	2.4	7"	2,000
SPN2520□□□□PSA	2.5±0.3	2.0±0.3	1.0+0.1/-0.2	0.9±0.3	0.85±0.35	2.1	0.6	2.8	7"	2,000
SPN2520□□□□PSC	2.5±0.3	2.0±0.3	1.2+0.1/-0.2	0.85±0.2	0.85±0.35	2.1	0.6	2.8	7"	2,000

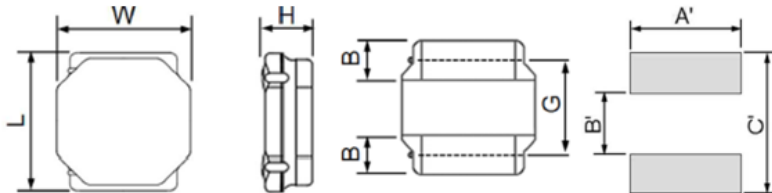


Series	L (mm)	W (mm)	H (mm)	B (mm)	G (mm)	Recommended Land Patterns			Package	
						A' (mm)	B' (mm)	C' (mm)	Reel	Amount (pcs)
SPS3030□□□□PCA	3.0±0.2	3.0±0.2	1.2+0.1/-0.2	0.9±0.2	1.2±0.3	2.7	1.1	3.1	7"	2,000
SPS4040□□□□PCA	4.0±0.2	4.0±0.2	1.0MAX	1.1±0.4	2.5±0.4	3.7	1.6	4.1	7"	1,000
SPS4040□□□□PCH	4.1±0.2	4.1±0.2	2.1Max	1.2±0.3	1.6±0.4	4.1	1.6	4.1	7"	700
SPN3030□□□□P_A	3.0±0.2	3.0±0.2	1.0+0.1/-0.2	1.0±0.3	1.0±0.3	2.7	0.8	3.0	7"	3,000
SPN3030□□□□PSC	3.0±0.2	3.0±0.2	1.3MAX	0.9±0.2	1.2±0.3	2.7	0.7	3.5	7"	2,000
SPN3030□□□□PSE	3.0±0.2	3.0±0.2	1.5±0.2	0.9±0.2	1.2±0.3	2.7	0.7	3.5	7"	2,000
SPN4040□□□□ESC	4.0±0.2	4.0±0.2	1.2Max	1.05±0.4	1.9±0.4	4.1	1.9	4.1	13"	4,500
SPN4040□□□□ESG	4.0±0.2	4.0±0.2	1.8MAX	1.2±0.4	1.6±0.4	4.1	1.5	4.1	13"	3,500

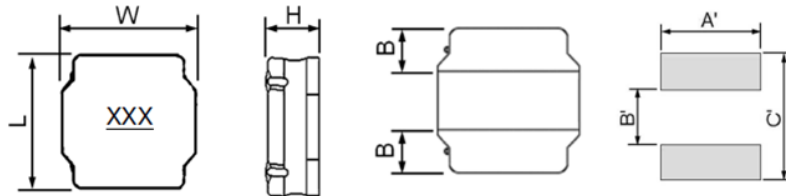
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Series	L (mm)	W (mm)	H (mm)	B (mm)	G (mm)	Recommended Land Patterns			Package	
						A' (mm)	B' (mm)	C' (mm)	Reel	Amount (pcs)
SPN4040□□□□ESL	4.0±0.3	4.0±0.3	3.1MAX	1.3±0.4	1.45±0.45	4.1	0.8	4.1	13"	2,000
SPN5050□□□□PSH	5.0±0.2	5.0±0.2	2.0±0.2	1.3±0.5	2.0±0.4	4.7	1.5	5.5	7"	800
SPN5050□□□□ESN	5.0±0.2	5.0±0.2	4.0+0.1/-0.3	1.7±0.3	1.8±0.4	4.7	1.1	5.5	13"	1,500
SPN6060□□□□MPSC	6.0±0.3	6.0±0.3	1.2+0.1/-0.2	1.7±0.4	2.6±0.4	5.7	1.9	6.7	7"	1,000
SPN6060□□□□ESH	6.0±0.2	6.0±0.2	2.0Max	1.6±0.4	2.4±0.4	5.7	3.1	6.3	13"	2,500
SPN6060□□□□ESK	6.0±0.2	6.0±0.2	2.8Max	1.6±0.4	2.6±0.4	5.7	3.1	6.3	13"	1,500
SPN6060□□□□ESP	6.0±0.2	6.0±0.2	4.5Max	1.8±0.4	2.3±0.4	5.7	3.1	6.3	13"	1,500
SPN8080□□□□ESN	8.0±0.2	8.0±0.2	4.2Max	2.1±0.4	3.8±0.4	7.7	3.8	8.0	13"	1,000



Series	L (mm)	W (mm)	H (mm)	B (mm)	G (mm)	Recommended Land Patterns			Package	
						A' (mm)	B' (mm)	C' (mm)	Reel	Amount (pcs)
SPS3030□□□□PCC	3.0±0.2	3.0±0.2	1.2 MAX	0.9±0.2	1.9±0.2	2.7	1.2	3.2	7"	2,000
SPS4040□□□□PCC	4.0±0.2	4.0±0.2	1.2Max	1.1±0.2	2.5±0.2	3.7	1.6	4.1	7"	1,000



Series	L (mm)	W (mm)	H (mm)	B (mm)	Recommended Land Patterns			Package	
					A' (mm)	B' (mm)	C' (mm)	Reel	Amount (pcs)
SPN6060□□□□NPSC	6.0±0.2	6.0±0.2	1.2±0.1	1.35±0.2	5.7	3.1	6.3	7"	1,000

\*New Series

For some special parts, please see the "Part Number & Characteristic" for detail specification

## ■ Part Numbers & Characteristic(SPS Series for Metal Coating)

### ● SPS2016

DARFONP/N	Size		Thickness (mm) Max.	Inductance		Inductance Tolerance %	DC Resistance (mΩ)		Heat Rating Current DC Amps. I <sub>dc</sub> (mA)		Saturation Current DC Amps. I <sub>sat</sub> (mA)		Measuring Condition
	Length	Width		Value	Unit		Typ.	Max.	Typ.	Max.	Typ.	Max.	
SPS2016R47NPCA	2.00	1.60	1.00	0.47	uH	± 30%	40.0	48.0	3,600	3,400	4,300	3,600	1MHz/1V
SPS2016R68NPCA				0.68	uH	± 30%	47.0	56.0	2,850	2,600	3,600	3,000	1MHz/1V
SPS2016R0NPCA				1.00	uH	± 30%	63.0	75.0	2,700	2,500	3,000	2,400	1MHz/1V
SPS2016R5NPCA				1.50	uH	± 30%	100.0	120.0	2,250	2,150	2,150	1,800	1MHz/1V
SPS2016R2MPCA				2.20	uH	± 20%	135.0	160.0	1,750	1,600	1,850	1,550	1MHz/1V
SPS2016R3MPCA				3.30	uH	± 20%	193.0	230.0	1,700	1,500	1,500	1,250	1MHz/1V
SPS2016R7MPCA				4.70	uH	± 20%	280.0	340.0	1,300	1,250	1,200	1,000	1MHz/1V
SPS2016R8MPCA				6.80	uH	± 20%	450.0	540.0	1,020	970	1,000	840	1MHz/1V
SPS2016R100MPCA				10.00	uH	± 20%	570.0	685.0	950	900	900	750	1MHz/1V

※Saturation current (I<sub>sat</sub>) : the maximum DC current will cause inductance drop approximately 30% from initial value.

※Heat rating current (I<sub>dc</sub>) : the maximum DC current will cause temperature rising approximately 40°C.

### ● SPS2520

DARFONP/N	Size		Thickness (mm) Max.	Inductance		Inductance Tolerance %	DC Resistance (mΩ)		Heat Rating Current DC Amps. I <sub>dc</sub> (mA)		Saturation Current DC Amps. I <sub>sat</sub> (mA)		Measuring Condition
	Length	Width		Value	Unit		Typ.	Max.	Typ.	Max.	Typ.	Max.	
SPS2520R47NPCA	2.50	2.00	1.00	0.47	uH	± 30%	55.0	65.0	3,100	3,000	5,500	4,000	1MHz/1V
SPS2520R47MPCA				0.47	uH	± 20%	55.0	65.0	3,100	3,000	5,500	4,000	1MHz/1V
SPS2520R68NPCA				0.68	uH	± 30%	52.0	62.0	3,100	2,700	4,400	4,050	1MHz/1V
SPS2520R0NPCA				1.00	uH	± 30%	67.0	80.0	2,950	2,550	4,100	3,350	1MHz/1V
SPS2520R5NPCA				1.50	uH	± 30%	88.0	106.0	2,250	1,950	3,450	2,850	1MHz/1V
SPS2520R2MPCA				2.20	uH	± 20%	124.0	150.0	1,850	1,550	3,200	2,600	1MHz/1V
SPS2520R3MPCA				3.30	uH	± 20%	185.0	222.0	1,450	1,250	2,500	2,100	1MHz/1V
SPS2520R47MPCA				4.70	uH	± 20%	240.0	290.0	1,300	1,100	2,150	1,750	1MHz/1V
SPS2520R8MPCA				6.80	uH	± 20%	360.0	435.0	1,150	960	1,700	1,400	1MHz/1V
SPS2520R100MPCA				10.00	uH	± 20%	440.0	530.0	960	850	1,550	1,280	1MHz/1V
SPS2520R47NPCC	2.50	2.00	1.20	0.47	uH	± 30%	28.5	34.5	4,600	4,200	5,500	4,600	1MHz/1V
SPS2520R68NPCC				0.68	uH	± 30%	33.5	40.2	3,900	3,400	4,000	3,300	1MHz/1V
SPS2520R0NPCC				1.00	uH	± 30%	46.5	55.5	3,500	3,200	3,700	3,000	1MHz/1V
SPS2520R2NPCC				1.20	uH	± 30%	57.0	68.5	3,400	3,150	3,550	2,950	1MHz/1V
SPS2520R5NPCC				1.50	uH	± 30%	66.5	80.0	3,000	2,800	2,900	2,400	1MHz/1V
SPS2520R2MPCC				2.20	uH	± 20%	93.0	111.0	2,600	2,300	2,500	2,100	1MHz/1V
SPS2520R3MPCC				3.30	uH	± 20%	128.0	154.0	2,200	2,000	1,900	1,600	1MHz/1V
SPS2520R47MPCC				4.70	uH	± 20%	190.0	230.0	1,850	1,700	1,600	1,300	1MHz/1V
SPS2520R8MPCC				6.80	uH	± 20%	220.0	265.0	1,600	1,500	1,350	1,100	1MHz/1V

※Saturation current (I<sub>sat</sub>) : the maximum DC current will cause inductance drop approximately 30% from initial value.

※Heat rating current (I<sub>dc</sub>) : the maximum DC current will cause temperature rising approximately 40°C.

### ● SPS3030

DARFONP/N	Size		Thickness (mm) Max.	Inductance		Inductance Tolerance %	DC Resistance (mΩ)		Heat Rating Current DC Amps. I <sub>dc</sub> (mA)		Saturation Current DC Amps. I <sub>sat</sub> (mA)		Measuring Condition
	Length	Width		Value	Unit		Typ.	Max.	Typ.	Max.	Typ.	Max.	
SPS3030R47MPCA	3.00	3.00	1.00	0.47	uH	± 20%	33.0	39.0	4,500	3,900	6,500	5,400	1MHz/1V
SPS3030R0MPCA				1.00	uH	± 20%	74.0	86.0	2,800	2,400	5,200	4,400	1MHz/1V
SPS3030R5MPCA				1.50	uH	± 20%	87.0	100.0	2,400	2,100	3,500	3,000	1MHz/1V
SPS3030R2MPCA				2.20	uH	± 20%	125.0	144.0	2,200	1,900	3,000	2,500	1MHz/1V
SPS3030R3MPCA				3.30	uH	± 20%	215.0	248.0	1,500	1,350	2,400	2,000	1MHz/1V
SPS3030R47MPCA				4.70	uH	± 20%	300.0	345.0	1,300	1,150	2,000	1,700	1MHz/1V
SPS3030R8MPCA				6.80	uH	± 20%	380.0	437.0	1,150	1,000	1,700	1,400	1MHz/1V
SPS3030R100MPCA				10.00	uH	± 20%	500.0	575.0	1,000	850	1,300	1,100	1MHz/1V
SPS3030R33MPCC	3.00	3.00	1.20	0.33	uH	± 20%	17.0	20.0	6,400	5,500	8,700	6,400	1MHz/1V
SPS3030R47MPCC				0.47	uH	± 20%	23.0	27.0	5,500	4,700	7,500	6,300	1MHz/1V
SPS3030R0MPCC				1.00	uH	± 20%	43.0	50.0	3,900	3,300	5,100	4,300	1MHz/1V

This catalog contains typical product specifications. When you consider using our products, please check our product specification sheets. (Characteristic diagram, reliability information, application notes... etc.) [https://www.darfon.com.tw/Component\\_Integration/en/](https://www.darfon.com.tw/Component_Integration/en/)



DARFONP/N	Size		Thickness (mm) Max.	Inductance		Inductance Tolerance %	DC Resistance (mΩ)		Heat Rating Current DC Amps. I <sub>dc</sub> (mA)		Saturation Current DC Amps. I <sub>sat</sub> (mA)		Measuring Condition
	Length	Width		Value	Unit		Typ.	Max.	Typ.	Max.	Typ.	Max.	
SPS30301R5MPCC	3.00	3.00	1.20	1.50	uH	± 20%	64.0	74.0	3,000	2,500	4,100	3,400	1MHz/1V
SPS30302R2MPCC				2.20	uH	± 20%	97.0	112.0	2,400	2,100	3,600	2,800	1MHz/1V
SPS30303R3MPCC				3.30	uH	± 20%	145.0	167.0	1,900	1,650	2,700	2,100	1MHz/1V
SPS30304R7MPCC				4.70	uH	± 20%	228.0	263.0	1,550	1,350	2,300	1,800	1MHz/1V

※Saturation current (I<sub>sat</sub>) : the maximum DC current will cause inductance drop approximately 30% from initial value.

※Heat rating current (I<sub>dc</sub>) : the maximum DC current will cause temperature rising approximately 40°C.

## ● SPS4040

DARFONP/N	Size		Thickness (mm) Max.	Inductance		Inductance Tolerance %	DC Resistance (mΩ)		Heat Rating Current DC Amps. I <sub>dc</sub> (mA)		Saturation Current DC Amps. I <sub>sat</sub> (mA)		Measuring Condition			
	Length	Width		Value	Unit		Typ.	Max.	Typ.	Max.	Typ.	Max.				
SPS4040R47MPCA	4.00	4.00	1.00	0.47	uH	± 20%	35.0	40.0	4,500	4,000	7,900	6,000	1MHz/1V			
SPS40401R0MPCA				1.00	uH	± 20%	60.0	69.0	3,500	3,000	5,700	4,700	1MHz/1V			
SPS40401R5MPCA				1.50	uH	± 20%	73.0	84.0	3,100	2,700	4,000	3,000	1MHz/1V			
SPS40402R2MPCA				2.20	uH	± 20%	100.0	115.0	2,700	2,400	3,100	2,400	1MHz/1V			
SPS40403R3MPCA				3.30	uH	± 20%	175.0	200.0	2,000	1,800	2,600	2,000	1MHz/1V			
SPS40404R7MPCA				4.70	uH	± 20%	220.0	250.0	1,900	1,600	2,300	1,900	1MHz/1V			
SPS40406R8MPCA				6.80	uH	± 20%	320.0	370.0	1,500	1,300	1,800	1,500	1MHz/1V			
SPS4040100MPCA				10.00	uH	± 20%	440.0	510.0	1,300	1,100	1,700	1,400	1MHz/1V			
SPS4040R47MPCC	4.00	4.00	1.20	0.47	uH	± 20%	25.0	29.0	5,400	4,600	10,000	7,500	1MHz/1V			
SPS40401R0MPCC				1.00	uH	± 20%	41.0	47.0	4,200	3,500	7,500	5,200	1MHz/1V			
SPS40401R2MPCC				1.20	uH	± 20%	41.0	47.0	4,200	3,500	6,200	4,200	1MHz/1V			
SPS40401R5MPCC				1.50	uH	± 20%	56.0	65.0	3,600	3,200	5,600	4,500	1MHz/1V			
SPS40402R2MPCC				2.20	uH	± 20%	69.0	79.0	3,200	2,800	4,500	3,800	1MHz/1V			
SPS40403R3MPCC				3.30	uH	± 20%	113.0	130.0	2,500	2,200	4,000	3,200	1MHz/1V			
SPS40404R7MPCC				4.70	uH	± 20%	140.0	160.0	2,200	1,900	3,000	2,500	1MHz/1V			
SPS40406R8MPCC				6.80	uH	± 20%	200.0	230.0	1,800	1,600	2,200	1,900	1MHz/1V			
SPS4040100MPCC				10.00	uH	± 20%	280.0	330.0	1,600	1,400	2,000	1,700	1MHz/1V			
SPS4040R33NPCH				4.10	4.10	2.10	0.33	uH	± 30%	11.0	13.0	8,100	7,000	21,000	16,000	1MHz/1V
SPS4040R47NPCH							0.47	uH	± 30%	11.0	13.0	8,100	7,000	15,000	10,000	1MHz/1V
SPS4040R68MPCH							0.68	uH	± 20%	14.0	16.0	6,000	5,200	12,000	8,000	1MHz/1V
SPS40401R0MPCH	1.00	uH	± 20%				23.5	28.0	5,100	4,400	9,400	7,000	1MHz/1V			
SPS40401R5MPCH	1.50	uH	± 20%				35.0	41.0	4,700	4,100	9,400	6,800	1MHz/1V			
SPS40402R2MPCH	2.20	uH	± 20%				47.0	54.0	4,000	3,500	7,500	5,400	1MHz/1V			
SPS40403R3MPCH	3.30	uH	± 20%				66.0	75.0	3,300	3,000	5,200	3,700	1MHz/1V			
SPS40404R7MPCH	4.70	uH	± 20%				93.0	107.0	2,800	2,500	5,000	3,500	1MHz/1V			
SPS40406R8MPCH	6.80	uH	± 20%				138.0	158.0	2,300	2,000	4,000	2,900	1MHz/1V			
SPS4040100MPCH	10.00	uH	± 20%				169.0	194.0	1,900	1,600	3,100	2,200	1MHz/1V			
SPS4040150MPCH	15.00	uH	± 20%				275.0	350.0	1,650	1,120	2,400	1,300	1MHz/1V			
SPS4040220MPCH	22.00	uH	± 20%				400.0	460.0	1,400	1,200	1,600	1,350	1MHz/1V			

※Saturation current (I<sub>sat</sub>) : the maximum DC current will cause inductance drop approximately 30% from initial value.

※Heat rating current (I<sub>dc</sub>) : the maximum DC current will cause temperature rising approximately 40°C.

## ■ Part Numbers & Characteristic (SPN Series for Ferrite Coating)

### ● SPN2016

DARFONP/N	Size		Thickness (mm) Max.	Inductance		Inductance Tolerance %	DC Resistance (mΩ)		Heat Rating Current DC Amps. I <sub>dc</sub> (mA)		Saturation Current DC Amps. I <sub>sat</sub> (mA)		Measuring Condition
	Length	Width		Value	Unit		Typ.	Max.	Typ.	Max.	Typ.	Max.	
SPN2016R47NPSA	2.00	1.60	1.00	0.47	uH	± 30%	49.0	59.0	2,600	2,340	2,850	2,560	1MHz/1V
SPN2016R68NPSA				0.68	uH	± 30%	71.0	86.0	2,250	2,000	2,300	2,200	1MHz/1V
SPN20161R0NPSA				1.00	uH	± 30%	96.0	115.0	1,600	1,440	1,880	1,690	1MHz/1V
SPN20161R5NPSA				1.50	uH	± 30%	143.0	172.0	1,400	1,260	1,630	1,460	1MHz/1V
SPN20161R8NPSA				1.80	uH	± 30%	175.0	210.0	1,350	1,210	1,500	1,350	1MHz/1V
SPN20162R2MPSA				2.20	uH	± 20%	196.0	235.0	1,300	1,170	1,400	1,260	1MHz/1V
SPN20163R3MPSA				3.30	uH	± 20%	247.0	296.0	1,050	940	1,000	900	1MHz/1V

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DARFONP/N	Size		Thickness (mm) Max.	Inductance		Inductance Tolerance %	DC Resistance (mΩ)		Heat Rating Current DC Amps. I <sub>dc</sub> (mA)		Saturation Current DC Amps. I <sub>sat</sub> (mA)		Measuring Condition
	Length	Width		Value	Unit		Typ.	Max.	Typ.	Max.	Typ.	Max.	
SPN20164R7MPSA	2.00	1.60	1.00	4.70	uH	± 20%	370.0	444.0	900	810	850	760	1MHz/1V
SPN20166R8MPSA				6.80	uH	± 20%	664.0	797.0	600	540	800	720	1MHz/1V
SPN2016100MPSA				10.00	uH	± 20%	1108.0	1330.0	450	400	620	550	1MHz/1V

※ Saturation current (I<sub>sat</sub>) : the maximum DC current will cause inductance drop approximately 30% from initial value.

※ Heat rating current (I<sub>dc</sub>) : the maximum DC current will cause temperature rising approximately 40°C.

## ● SPN2520

DARFONP/N	Size		Thickness (mm) Max.	Inductance		Inductance Tolerance %	DC Resistance (mΩ)		Heat Rating Current DC Amps. I <sub>dc</sub> (mA)		Saturation Current DC Amps. I <sub>sat</sub> (mA)		Measuring Condition
	Length	Width		Value	Unit		Typ.	Max.	Typ.	Max.	Typ.	Max.	
SPN2520R50NPSA	2.50	2.00	1.00	0.50	uH	± 30%	32.0	38.0	2,670	2,400	3,300	3,000	1MHz/1V
SPN2520R68NPSA				0.68	uH	± 30%	49.0	59.0	2,400	2,160	2,700	2,430	1MHz/1V
SPN25201R0NPSA				1.00	uH	± 30%	68.0	82.0	1,980	1,780	2,400	2,200	1MHz/1V
SPN25201R5MPSA				1.50	uH	± 20%	95.0	114.0	1,800	1,490	1,750	1,580	1MHz/1V
SPN25202R2MPSA				2.20	uH	± 20%	136.0	163.0	1,680	1,260	1,550	1,390	1MHz/1V
SPN25203R3MPSA				3.30	uH	± 20%	207.0	248.0	990	1,040	1,300	1,170	1MHz/1V
SPN25204R7MPSA				4.70	uH	± 20%	269.0	323.0	810	890	1,200	1,080	1MHz/1V
SPN25206R8MPSA				6.80	uH	± 20%	404.0	485.0	720	730	850	770	1MHz/1V
SPN2520100MPSA				10.00	uH	± 20%	508.0	610.0	1,600	640	730	650	1MHz/1V
SPN2520R24NPSC	2.50	2.00	1.20	0.24	uH	± 30%	26.0	31.0	4,500	4,000	4,800	4,500	1MHz/1V
SPN2520R47NPSC				0.47	uH	± 30%	29.0	35.0	3,700	3,300	3,900	3,500	1MHz/1V
SPN2520R50NPSC				0.50	uH	± 30%	32.0	38.0	3,600	3,240	3,800	3,400	1MHz/1V
SPN2520R68NPSC				0.68	uH	± 30%	54.0	65.0	3,240	2,700	3,600	3,400	1MHz/1V
SPN25201R0NPSC				1.00	uH	± 30%	43.0	52.0	2,600	2,340	2,700	2,450	1MHz/1V
SPN25201R5MPSC				1.50	uH	± 20%	72.0	86.0	2,200	1,980	2,300	2,070	1MHz/1V
SPN25202R2MPSC				2.20	uH	± 20%	90.0	108.0	1,850	1,750	2,150	1,950	1MHz/1V
SPN25203R3MPSC				3.30	uH	± 20%	155.0	186.0	1,450	1,310	1,700	1,600	1MHz/1V
SPN25204R7MPSC				4.70	uH	± 20%	212.0	254.0	1,200	1,080	1,500	1,400	1MHz/1V
SPN25206R8MPSC				6.80	uH	± 20%	370.0	444.0	1,000	900	1,150	1,040	1MHz/1V
SPN2520100MPSC	10.00	uH	± 20%	750.0	900.0	750	680	850	700	1MHz/1V			

※ Saturation current (I<sub>sat</sub>) : the maximum DC current will cause inductance drop approximately 30% from initial value.

※ Heat rating current (I<sub>dc</sub>) : the maximum DC current will cause temperature rising approximately 40°C.

## ● SPN3030

DARFONP/N	Size		Thickness (mm) Max.	Inductance		Inductance Tolerance %	DC Resistance (mΩ)		Heat Rating Current DC Amps. I <sub>dc</sub> (mA)	Saturation Current DC Amps. I <sub>sat</sub> (mA)	Measuring Condition
	Length	Width		Value	Unit		Typ.	Max.			
SPN30302R2NPSA	3.00	3.00	1.10	2.20	uH	±30%	95.0	114.0	1,100	1,100	100KHz/1V
SPN30304R7MPSA				4.70	uH	±20%	265.0	293.0	900	750	100KHz/1V
SPN3030100MPCA	3.00	3.00	1.10	10.00	uH	±20%	450.0	540.0	540	540	100KHz/1V
SPN3301R0NPSC	3.00	3.00	1.30	1.00	uH	± 30%	40.0	52.0	2,200	1,870	100KHz/1V
SPN3301R5NPSC				1.50	uH	± 30%	45.0	58.5	2,010	1,620	100KHz/1V
SPN3302R2NPSC				2.20	uH	± 30%	75.0	97.5	1,550	1,200	100KHz/1V
SPN3303R3MPSC				3.30	uH	± 20%	100.0	130.0	1,360	1,050	100KHz/1V
SPN3304R7MPSC				4.70	uH	± 20%	150.0	195.0	1,240	900	100KHz/1V
SPN3306R8MPSC				6.80	uH	± 20%	190.0	247.0	980	750	100KHz/1V
SPN330100MPSC				10.00	uH	± 20%	320.0	416.0	830	600	100KHz/1V
SPN330150MPSC				15.00	uH	± 20%	360.0	468.0	710	450	100KHz/1V
SPN330220MPSC				22.00	uH	± 20%	645.0	838.5	530	420	100KHz/1V
SPN330330MPSC				33.00	uH	± 20%	875.0	1137.5	460	360	100KHz/1V
SPN330470MPSC	47.00	uH	± 20%	1450.0	1885.0	350	270	100KHz/1V			
SPN30301R0NPSE	3.00	3.00	1.70	1.00	uH	± 30%	39.0	50.7	2,350	2,320	100KHz/1V
SPN30301R5NPSE				1.50	uH	± 30%	50.0	65.0	1,700	2,000	100KHz/1V
SPN30302R2MPSE				2.20	uH	± 20%	60.0	78.0	1,600	1,600	100KHz/1V

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DARFONP/N	Size		Thickness (mm) Max.	Inductance		Inductance Tolerance %	DC Resistance (mΩ)		Heat Rating Current DC Amps. I <sub>dc</sub> (mA)		Saturation Current DC Amps. I <sub>sat</sub> (mA)		Measuring Condition
	Length	Width		Value	Unit		Typ.	Max.	Typ.	Max.	Typ.	Max.	
SPN30303R3MPSE	3.00	3.00	1.70	3.30	uH	± 20%	80.0	104.0	1,360		1,320		100KHz/1V
SPN30304R7MPSE				4.70	uH	± 20%	125.0	162.5	1,090		1,100		100KHz/1V
SPN30306R8MPSE				6.80	uH	± 20%	200.0	260.0	850		850		100KHz/1V
SPN3030100MPSE				10.00	uH	± 20%	250.0	325.0	770		720		100KHz/1V
SPN3030150MPSE				15.00	uH	± 20%	350.0	455.0	650		660		100KHz/1V
SPN3030220MPSE				22.00	uH	± 20%	460.0	598.0	570		520		100KHz/1V
SPN3030330MPSE				33.00	uH	± 20%	820.0	1066.0	430		440		100KHz/1V
SPN3030470MPSE				47.00	uH	± 20%	1250.0	1625.0	350		350		100KHz/1V

※Saturation current (I<sub>sat</sub>) : the maximum DC current will cause inductance drop approximately 30% from initial value.

※Heat rating current (I<sub>dc</sub>) : the maximum DC current will cause temperature rising approximately 40°C.

### ● SPN4040

DARFONP/N	Size		Thickness (mm) Max.	Inductance		Inductance Tolerance %	DC Resistance (mΩ)		Heat Rating Current DC Amps. I <sub>dc</sub> (mA)		Saturation Current DC Amps. I <sub>sat</sub> (mA)		Measuring Condition
	Length	Width		Value	Unit		Typ.	Max.	Typ.	Max.	Typ.	Max.	
SPN40401R0NESC	4.00	4.00	1.20	1.00	uH	±30%	42.0	55.0	2,300	2,000	3,000	2,800	100KHz/1V
SPN40402R2MESC				2.20	uH	±20%	75.0	100.0	1,900	1,320	2,000	1,760	100KHz/1V
SPN40403R3MESC				3.30	uH	±20%	75.0	100.0	1,900	1,320	1,650	1,350	100KHz/1V
SPN40404R7MESC				4.70	uH	±20%	125.0	163.0	1,400	1,000	1,500	1,150	100KHz/1V
SPN40406R8MESC				6.80	uH	±20%	175.0	228.0	1,100	850	1,300	1,150	100KHz/1V
SPN4040100MESC				10.00	uH	±20%	180.0	234.0	1,000	800	950	850	100KHz/1V
SPN4040150MESC				15.00	uH	±20%	310.0	400.0	800	650	800	680	100KHz/1V
SPN4040220MESC				22.00	uH	±20%	530.0	690.0	750	490	700	500	100KHz/1V
SPN40401R0NESG	4.00	4.00	1.80	1.00	uH	±30%	27.0	33.0	3,720	3,200	4,590	4,000	100KHz/1V
SPN40401R5NESG				1.50	uH	±30%	37.0	48.0	3,000	2,400	3,750	3,300	100KHz/1V
SPN40402R2MESG				2.20	uH	±20%	42.0	51.0	2,590	2,200	3,110	3,000	100KHz/1V
SPN40403R3MESG				3.30	uH	±20%	55.0	66.0	2,240	2,000	2,560	2,300	100KHz/1V
SPN40404R7MESG				4.70	uH	±20%	70.0	84.0	1,880	1,700	2,330	2,000	100KHz/1V
SPN40406R8MESG				6.80	uH	±20%	98.0	118.0	1,690	1,450	1,820	1,600	100KHz/1V
SPN4040100MESG				10.00	uH	±20%	150.0	180.0	1,250	1,200	1,440	1,300	100KHz/1V
SPN4040150MESG				15.00	uH	±20%	210.0	252.0	920	850	1,150	1,100	100KHz/1V
SPN4040220MESG	22.00	uH	±20%	290.0	348.0	810	720	920	900	100KHz/1V			
SPN4040R68NESL	4.00	4.00	3.10	0.68	uH	± 30%	10.0	13.0	5,100	4,560	8,000	6,800	100KHz/1V
SPN40401R0NESL				1.00	uH	± 30%	14.0	18.0	4,700	4,150	5,700	5,260	100KHz/1V
SPN40401R5NESL				1.50	uH	± 30%	20.0	26.0	3,600	3,340	5,300	4,840	100KHz/1V
SPN40402R2MESL				2.20	uH	± 20%	30.0	39.0	3,200	2,950	5,800	4,900	100KHz/1V
SPN40403R3MESL				3.30	uH	±20%	40.0	52.0	2,600	2,400	3,600	3,300	100KHz/1V
SPN40404R7MESL				4.70	uH	±20%	60.0	78.0	2,300	2,000	3,200	2,900	100KHz/1V
SPN40406R8MESL				6.80	uH	±20%	90.0	117.0	1,700	1,600	3,000	2,750	100KHz/1V
SPN4040100MESL				10.00	uH	±20%	100.0	130.0	1,600	1,500	2,400	1,950	100KHz/1V
SPN4040150MESL				15.00	uH	±20%	190.0	247.0	1,200	1,110	1,800	1,650	100KHz/1V
SPN4040220MESL				22.00	uH	±20%	225.0	292.0	1,200	1,000	1,400	1,300	100KHz/1V
SPN4040330MESL				33.00	uH	±20%	330.0	429.0	920	840	1,200	1,100	100KHz/1V

※Saturation current (I<sub>sat</sub>) : the maximum DC current will cause inductance drop approximately 30% from initial value.

※Heat rating current (I<sub>dc</sub>) : the maximum DC current will cause temperature rising approximately 40°C.

### ● SPN5050

DARFONP/N	Size		Thickness (mm) Max.	Inductance		Inductance Tolerance %	DC Resistance (mΩ)		Heat Rating Current DC Amps. I <sub>dc</sub> (mA)		Saturation Current DC Amps. I <sub>sat</sub> (mA)		Measuring Condition
	Length	Width		Value	Unit		Typ.	Max.	Typ.	Max.	Typ.	Max.	
SPN5050R47NPSH	5.00	5.00	2.20	0.47	uH	± 30%	12.0	14.4	5,800	5,000	6,900	6,100	100KHz/1V
SPN50501R0NPSH				1.00	uH	± 30%	21.0	25.2	3,710	3,600	4,500	4,000	100KHz/1V
SPN50501R5NPSH				1.50	uH	± 30%	26.0	31.2	3,540	3,200	3,800	3,350	100KHz/1V

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DARFONP/N	Size		Thickness (mm)	Inductance		Inductance Tolerance %	DC Resistance (mΩ)		Heat Rating Current DC Amps. I <sub>dc</sub> (mA)		Saturation Current DC Amps. I <sub>sat</sub> (mA)		Measuring Condition
	Length	Width		Max.	Value		Unit	Typ.	Max.	Typ.	Max.	Typ.	
SPN50502R2NPSH	5.00	5.00	2.20	2.20	uH	± 30%	35.0	42.0	3,200	2,900	3,200	2,900	100KHz/1V
SPN50503R3NPSH				3.30	uH	± 30%	48.0	57.6	3,080	2,400	2,700	2,400	100KHz/1V
SPN50504R7MPSH				4.70	uH	± 20%	60.0	72.0	2,370	2,000	2,270	2,000	100KHz/1V
SPN50506R8MPSH				6.80	uH	± 20%	90.0	108.0	2,200	1,650	1,850	1,600	100KHz/1V
SPN5050100MPSH				10.00	uH	± 20%	120.0	144.0	1,850	1,450	1,480	1,300	100KHz/1V
SPN5050150MPSH				15.00	uH	± 20%	165.0	198.0	1,480	1,200	1,260	1,100	100KHz/1V
SPN5050220MPSH				22.00	uH	± 20%	260.0	312.0	1,230	1,000	1,100	900	100KHz/1V
SPN50501R0NESN	5.00	5.00	4.00	1.00	uH	± 30%	12.0	15.6	5,100	4,900	8,200	7,350	100KHz/1V
SPN50501R2NESN				1.20	uH	± 30%	16.0	20.8	4,900	4,150	7,400	6,500	100KHz/1V
SPN50501R5NESN				1.50	uH	± 30%	17.0	22.0	4,800	4,500	7,300	6,400	100KHz/1V
SPN50502R2NESN				2.20	uH	± 30%	19.0	24.7	4,400	3,800	5,700	5,000	100KHz/1V
SPN50503R3NESN				3.30	uH	± 30%	24.0	31.2	3,950	3,400	4,600	4,000	100KHz/1V
SPN50504R7NESN				4.70	uH	± 30%	32.0	41.6	3,300	3,100	3,950	3,500	100KHz/1V
SPN50506R8MESN				6.80	uH	± 20%	43.0	55.9	2,900	2,500	3,500	2,900	100KHz/1V
SPN5050100MESN				10.00	uH	± 20%	56.0	73.0	2,550	2,100	3,000	2,300	100KHz/1V
SPN5050150MESN				15.00	uH	± 20%	80.0	104.0	2,200	2,000	2,300	2,000	100KHz/1V
SPN5050220MESN				22.00	uH	± 20%	126.0	164.0	1,600	1,500	1,900	1,600	100KHz/1V
SPN5050101MESN				100.00	uH	± 20%	560.0	728.0	770	700	820	750	100KHz/1V

※Saturation current (I<sub>sat</sub>) : the maximum DC current will cause inductance drop approximately 30% from initial value.

※Heat rating current (I<sub>dc</sub>) : the maximum DC current will cause temperature rising approximately 40°C.

## ● SPN6060

DARFONP/N	Size		Thickness (mm)	Inductance		Inductance Tolerance %	DC Resistance (mΩ)		Heat Rating Current DC Amps. I <sub>dc</sub> (mA)		Saturation Current DC Amps. I <sub>sat</sub> (mA)		Measuring Condition
	Length	Width		Max.	Value		Unit	Typ.	Max.	Typ.	Max.	Typ.	
SPN60606R8NPSC	6.00	6.00	1.30	6.80	uH	± 30%	290.0	320.0	--	--	--	1,600	100KHz, 1V
SPN6060100MPSC	6.00	6.00	1.30	10.00	uH	± 20%	335.0	402.0	--	770	--	1,450	100KHz, 1V
SPN60600R8NESH	6.00	6.00	2.00	0.80	uH	± 30%	20.0	24.0	4,350	3,900	5,650	4,600	100KHz/1V
SPN60601R5NESH				1.50	uH	± 30%	26.0	31.2	4,200	3,600	5,300	4,300	100KHz/1V
SPN60602R2NESH				2.20	uH	± 30%	34.0	40.8	3,400	2,900	4,500	3,750	100KHz/1V
SPN60603R3NESH				3.30	uH	± 30%	40.0	48.0	3,100	2,750	3,700	3,150	100KHz/1V
SPN60604R7MESH				4.70	uH	± 20%	58.0	69.6	2,500	2,150	3,600	3,000	100KHz/1V
SPN60606R8MESH				6.80	uH	± 20%	85.0	102.0	2,100	1,800	2,600	2,000	100KHz/1V
SPN6060100MESH				10.00	uH	± 20%	125.0	150.0	1,700	1,400	2,240	1,700	100KHz/1V
SPN6060150MESH				15.00	uH	± 20%	145.0	189.0	1,500	1,200	1,400	1,200	100KHz/1V
SPN6060220MESH				22.00	uH	± 20%	200.0	265.0	1,300	1,000	1,200	1,050	100KHz/1V
SPN60602R2NESK				6.00	6.00	2.80	2.20	uH	± 30%	20.0	26.0	--	3,700
SPN60603R3MESK	3.30	uH	± 20%				23.0	29.9	--	3,400	--	3,600	100KHz/1V
SPN60604R7MESK	4.70	uH	± 20%				31.0	40.3	--	3,000	--	2,700	100KHz/1V
SPN60606R0MESK	6.00	uH	± 20%				40.0	52.0	--	2,500	--	2,500	100KHz/1V
SPN6060100MESK	10.00	uH	± 20%				67.0	84.5	--	1,900	--	1,900	100KHz/1V
SPN6060150MESK	15.00	uH	± 20%				95.0	114.0	--	1,800	--	1,600	100KHz/1V
SPN6060220MESK	22.00	uH	± 20%				135.0	175.5	--	1,400	--	1,300	100KHz/1V
SPN6060330MESK	33.00	uH	± 20%				220.0	250.0	--	1,100	--	1,200	100KHz/1V
SPN6060101MESK	100.00	uH	± 20%				600.0	780.0	--	660	--	620	100KHz/1V
SPN6060221MESK	220.00	uH	± 20%				1500.0	1600.0	--	200	--	200	100KHz/1V
SPN60601R0NESP	6.00	6.00	4.50				1.00	uH	± 30%	14.0	18.2	5,200	4,500
SPN60601R5NESP				1.50	uH	± 30%	12.0	15.6	5,300	4,950	9,200	8,800	100KHz/1V
SPN60602R2NESP				2.20	uH	± 30%	22.0	28.6	4,100	3,600	7,300	6,400	100KHz/1V
SPN60603R3NESP				3.30	uH	± 30%	24.0	31.2	4,000	3,300	6,500	5,600	100KHz/1V
SPN60604R7MESP				4.70	uH	± 20%	30.0	39.0	3,600	3,100	5,400	4,400	100KHz/1V
SPN60606R8MESP				6.80	uH	± 20%	36.0	46.8	3,300	3,000	4,300	3,600	100KHz/1V

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DARFONP/N	Size		Thickness (mm) Max.	Inductance		Inductance Tolerance %	DC Resistance (mΩ)		Heat Rating Current DC Amps. I <sub>dc</sub> (mA)		Saturation Current DC Amps. I <sub>sat</sub> (mA)		Measuring Condition
	Length	Width		Value	Unit		Typ.	Max.	Typ.	Max.	Typ.	Max.	
SPN6060100MESP	6.00	6.00	4.50	10.00	uH	± 20%	46.0	59.8	2,800	2,400	3,600	3,100	100KHz/1V
SPN6060150MESP				15.00	uH	± 20%	70.0	91.0	2,300	1,900	3,000	2,500	100KHz/1V
SPN6060220MESP				22.00	uH	± 20%	107.0	139.1	1,900	1,600	2,400	2,000	100KHz/1V
SPN6060330MESP				33.00	uH	± 20%	160.0	188.5	1,750	1,500	2,300	2,100	100KHz/1V

※ Saturation current (I<sub>sat</sub>) : the maximum DC current will cause inductance drop approximately 30% from initial value.

※ Heat rating current (I<sub>dc</sub>) : the maximum DC current will cause temperature rising approximately 40°C.

## ● SPN8080

DARFONP/N	Size		Thickness (mm) Max.	Inductance		Inductance Tolerance %	DC Resistance (mΩ)		Heat Rating Current DC Amps. I <sub>dc</sub> (mA)		Saturation Current DC Amps. I <sub>sat</sub> (mA)		Measuring Condition
	Length	Width		Value	Unit		Typ.	Max.	Typ.	Max.	Typ.	Max.	
SPN80801R0NESN	8.00	8.00	4.00	1.00	uH	± 30%	6.0	7.8	9,600	7,800	14,000	13,000	100KHz/1V
SPN80802R0NESN				2.00	uH	± 30%	9.0	11.7	7,600	6,300	9,200	8,100	100KHz/1V
SPN80802R2NESN				2.20	uH	± 30%	9.0	11.7	7,600	6,300	9,200	8,100	100KHz/1V
SPN80803R3NESN				3.30	uH	± 30%	15.0	19.5	6,000	4,900	6,800	6,400	100KHz/1V
SPN80803R6NESN				3.60	uH	± 30%	15.0	19.5	6,000	4,900	6,800	6,400	100KHz/1V
SPN80804R7NESN				4.70	uH	± 30%	18.0	23.4	5,200	4,100	5,900	5,400	100KHz/1V
SPN80806R8NESN				6.80	uH	± 30%	25.0	32.5	4,400	3,700	4,800	4,400	100KHz/1V
SPN80808R2MESN				8.20	uH	± 20%	26.0	34.0	3,700	3,450	4,400	4,200	100KHz/1V
SPN8080100MESN				10.00	uH	± 20%	34.0	44.2	3,500	3,100	4,100	3,800	100KHz/1V
SPN8080150MESN				15.00	uH	± 20%	50.0	65.0	3,000	2,400	3,200	2,900	100KHz/1V
SPN8080220MESN				22.00	uH	± 20%	66.0	85.8	2,600	2,200	2,700	2,400	100KHz/1V
SPN8080330MESN				33.00	uH	± 20%	100.0	130.0	1,900	1,700	2,300	2,000	100KHz/1V
SPN8080470MESN				47.00	uH	± 20%	140.0	182.0	1,600	1,500	1,800	1,500	100KHz/1V
SPN8080680MESN				68.00	uH	± 20%	196.0	255.0	1,450	1,250	1,550	1,450	100KHz/1V
SPN8080101MESN				100.00	uH	± 20%	280.0	364.0	1,100	1,000	1,300	1,100	100KHz/1V

※ Saturation current (I<sub>sat</sub>) : the maximum DC current will cause inductance drop approximately 30% from initial value.

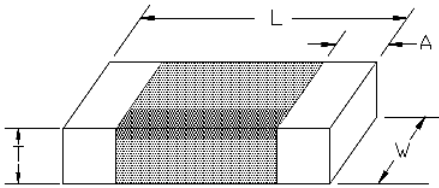
※ Heat rating current (I<sub>dc</sub>) : the maximum DC current will cause temperature rising approximately 40°C.

## Multi-Layer Inductor

■ **Feature**

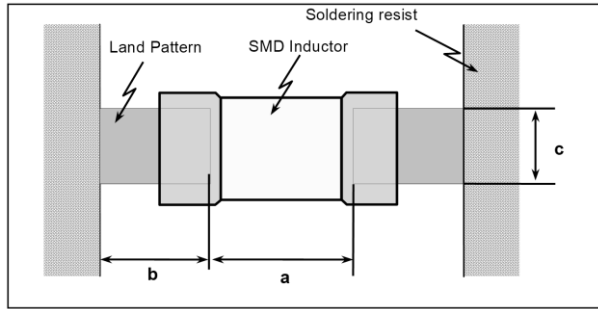
1. Small and light weight
2. Low DC resistance
3. RoHS complaint

■ **External Dimension**



■ **Application**

DC/DC converter for the Mobile equipment; Mobile Phone, DSC, WLAN



Series mm/(inch)	L (mm)	W (mm)	T (mm)	A (Min/Max)	Recommended Pad Dimensions				Package	
					LxW (mm)	a (mm)	b (mm)	c (mm)	Reel	Amount (pcs)
IP1608 (0603)	1.6±0.15	0.8±0.15	0.95max	0.1/0.5	1.6x0.8	0.8to1.0	0.6to0.8	0.6to0.8	7"	4,000
IP2012_S (0805)	2.0±0.2	1.25±0.2	1.0max	0.2/0.8	2.0x1.25	0.8to1.2	0.8to1.2	0.9to1.6	7"	3,000
IP2012_L (0805)	2.0±0.2	1.25±0.2	1.0max	0.5±0.3	2.0x1.25	0.8to1.2	0.8to1.2	0.9to1.6	7"	3,000
IP2016 (0806)	2.0±0.2	1.6±0.2	1.0max	0.2/0.8	2.0x1.6	0.8to1.2	0.8to1.2	0.9to1.6	7"	3,000
IP2520 (1008)	2.5±0.2	2.0±0.2	1.0max	0.2/0.8	2.5x2.0	1.0to1.4	0.6to1.0	1.8to2.2	7"	3,000

Power Inductors

## ■ PartNumbers&Characteristic

### ● IP1608(EIA0603)

DARFONP/N	Size		Thickness (mm) Max.	Inductance		Inductance Tolerance %	DC Resistance (mΩ)		Rated Current (mA) Max.	Saturation Current (mA) Typ.		SRF (MHz)Min.	Measuring Condition
	Length	Width		Value	Unit		Typ.	Max.		Typ.	Max.		
IP16081R0MTS8	1.60	0.80	0.95	1.00	uH	±20%	170.0	200.0	750	500	140	1MHz/1V	
IP16082R2MTS8				2.20	uH	±20%	270.0	300.0	650	250	80	1MHz/1V	

※OPERATINGTEMPERATURERANGE : -40°C TO +85°C

### ● IP2012(EIA0805)

DARFONP/N	Size		Thickness (mm) Max.	Inductance		Inductance Tolerance %	DC Resistance (mΩ)		Rated Current (mA) Max.	Saturation Current (mA) Typ.		SRF (MHz) Min.	Measuring Condition
	Length	Width		Value	Unit		Typ.	Max.		Typ.	Max.		
IP2012R47MPS9	2.00	1.25	1.00	0.47	uH	±20%	60.0	80.0	1,200	1,200	160	1MKHz/1V	
IP20121R0MPS9				1.00	uH	±20%	110.0	140.0	1,000	1,100	120	1MKHz/1V	
IP20121R5MPS9				1.50	uH	±20%	150.0	200.0	800	900	95	1MKHz/1V	
IP20122R2MPS9				2.20	uH	±20%	150.0	200.0	800	450	70	1MKHz/1V	
IP20123R3MPS9				3.30	uH	±20%	200.0	240.0	700	300	70	1MKHz/1V	
IP20124R7MPS9				4.70	uH	±20%	230.0	280.0	700	180	60	1MKHz/1V	
IP20122R2MPL9	2.00	1.25	1.00	2.20	uH	±20%	340.0	430.0	700	--	85	1MKHz/100mV	
IP20124R7MPL9				4.70	uH	±20%	460.0	580.0	460	--	50	1MKHz/100mV	

※OPERATINGTEMPERATURERANGE : -40°C TO +85°C

### ● IP2016(EIA0806)

DARFONP/N	Size		Thickness (mm) Max.	Inductance		Inductance Tolerance %	DC Resistance (mΩ)		Rated Current (mA) Max.	Saturation Current (mA) Typ.		SRF (MHz)Min.	Measuring Condition
	Length	Width		Value	Unit		Typ.	Max.		Typ.	Max.		
IP2016R47MPS9	2.00	1.60	1.00	0.47	uH	±20%	60.0	750.0	1,600	1,200	150	1MKHz/1V	
IP20161R0MPS9				1.00	uH	±20%	90.0	120.0	1,300	1,100	100	1MKHz/1V	
IP20161R5MPS9				1.50	uH	±20%	100.0	130.0	1,200	800	85	1MKHz/1V	
IP20162R2MPS9				2.20	uH	±20%	110.0	140.0	1,200	600	65	1MKHz/1V	
IP20163R3MPS9				3.30	uH	±20%	130.0	160.0	1,100	300	65	1MKHz/1V	
IP20164R7MPS9				4.70	uH	±20%	160.0	200.0	900	200	55	1MKHz/1V	

※OPERATINGTEMPERATURERANGE : -40°C TO +85°C

### ● IP2520(EIA1008)

DARFONP/N	Size		Thickness (mm) Max.	Inductance		Inductance Tolerance %	DC Resistance (mΩ)		Rated Current (mA) Max.	Saturation Current (mA) Typ.		SRF (MHz)Min.	Measuring Condition
	Length	Width		Value	Unit		Typ.	Max.		Typ.	Max.		
IP2520R47MPS9	2.50	2.00	1.00	0.47	uH	±20%	40.0	50.0	1,800	1,600	1,280	100	1MKHz/1V
IP25201R0MPS9				1.00	uH	±20%	60.0	80.0	1,400	1,200	960	95	1MKHz/1V
IP25201R5MPS9				1.50	uH	±20%	75.0	90.0	1,300	800	640	80	1MKHz/1V
IP25202R2MPS9				2.20	uH	±20%	75.0	90.0	1,300	700	560	60	1MKHz/1V
IP25203R3MPS9				3.30	uH	±20%	90.0	120.0	1,200	300	240	55	1MKHz/1V
IP25204R7MPS9				4.70	uH	±20%	120.0	150.0	1,100	300	240	45	1MKHz/1V

※OPERATINGTEMPERATURERANGE : -40°C TO +85°C

# MetalMulti-Layer Inductor

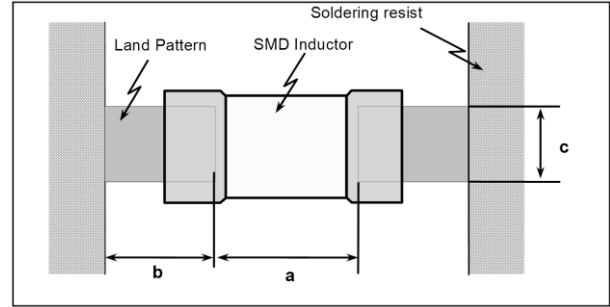
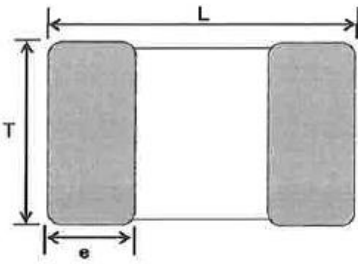
## Feature

1. Small and lightweight
2. Low DC resistance
3. RoHS compliant

## Application

DC/DC converter for the Mobile equipment; Mobile Phone, DSC, WLAN

## External Dimension



Series mm/(inch)	L (mm)	W (mm)	T (mm)	e (mm)	Recommended Pad Dimensions			Package	
					a (mm)	b (mm)	c (mm)	Reel	Amount (pcs)
IP1608 (0603)	1.6±0.2	0.8±0.2	0.65max	0.3±0.2	0.8to1.0	0.6to0.8	0.6to0.8	7"	4,000
IP2012 (0805)	2.0±0.2	1.25±0.2	0.80max	0.5±0.3	0.8to1.2	0.8to1.2	0.9to1.6	7"	4,000

## Part Numbers & Characteristic

### IP1608\_C (EIA0603)

DARFON P/N	Size		Thickness (mm) Max.	Inductance		Inductance Tolerance %	DC Resistance (mΩ)		Temperature Rise Current (mA)		Saturation Current (mA)		Measuring Condition
	Length	Width		Value	Unit		Typ.	Max.	Typ.	Max.	Typ.	Max.	
			Value			Unit							
IP1608R24MPC6	1.6	0.8	0.65	0.24	uH	±20%	75.0	100.0	1,700	1,500	3,100	2,600	1MHz/10V
IP1608R47MPC6				0.47	uH	±20%	114.0	150.0	1,400	1,200	2,400	2,000	1MHz/10V
IP16081R0MPC6				1.00	uH	±20%	270.0	340.0	900	800	1,700	1,400	1MHz/10V

※ OPERATING TEMPERATURE RANGE : -40°C TO +125°C (Including self-generated heat)

### IP2012\_C (EIA0805)

DARFON P/N	Size		Thickness (mm) Max.	Inductance		Inductance Tolerance %	DC Resistance (mΩ)		Temperature Rise Current (mA)		Saturation Current (mA)		Measuring Condition
	Length	Width		Value	Unit		Typ.	Max.	Typ.	Max.	Typ.	Max.	
			Value			Unit							
IP2012R11MPC8	2.0	1.25	0.80	0.11	uH	±20%	9.1	12.0	7,900	6,900	6,600	5,800	1MHz/10V
IP2012R24MPC8				0.24	uH	±20%	14.0	17.0	7,000	6,000	5,200	4,800	1MHz/10V
IP2012R47MPC8				0.47	uH	±20%	26.0	32.0	5,000	4,800	4,400	4,000	1MHz/10V