DARFON Inductors-SPM/SPH/SPN Ordering

Ordering Code

SPM 2520 2R2 M P S A

Product Code:

SPM: Molding Inductor
SPN : Coating Inductor(Normal)
SPH :Coating Inductor(High Current)

Dimension (L X W): mm

Code	Dimension	Code	Dimension
1210	1.2 X 1.0 mm	5050	5.0 X 5.0 mm
2016	2.0 X 1.6 mm	6060	6.0 X 6.0 mm
2020	2.0 X 2.0 mm	7070	7.0 X 7.0 mm
2424	2.4 X 2.4 mm	8080	8.0 X 8.0 mm
2520	2.5 X 2.0 mm	1010	10 X 10 mm
3030	3.0 X 3.0 mm	1313	13 X 13 mm
4040	4.0 X 4.0 mm		

Thickness Code:

Code	Thick	Code	Thick	Code	Thick
5	0.5	E	1.5	L	3.0
7	0.7	F	1.6	M	3.5
9	0.9	G	1.8	N	4.0
A	1.0	H	2.0	P	4.5
B	1.1	I	2.4	Q	5.0
C	1.2	J	2.5	R	6.0
D	1.4	K	2.8	S	6.5

Inductor Value

R22=0.22 uH 2R2=2.2 uH
220=22 uH 221=220 uH
102=1000 uH

Tolerance Code:

M: ±20%
T: ±25%
N: ±30%

Packaging Code:

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

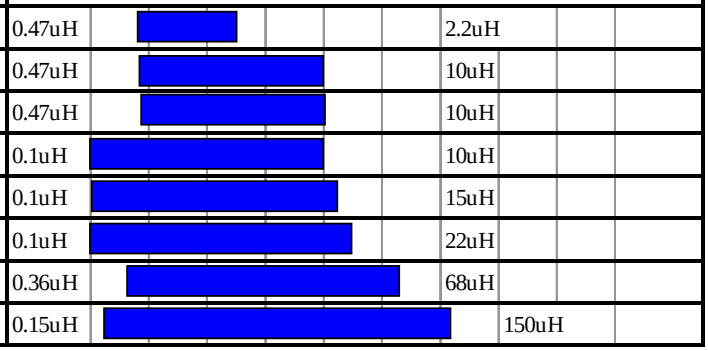
Specification:

S:Standard
C:High Current
R:Low DCR
M: Standard with vertical mark
H:High Current with vertical mark
T: Specific Spec

Product Range

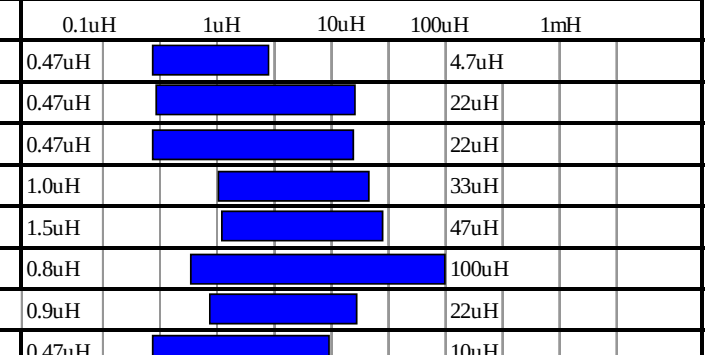
SPM Series

DARFON Item	Dimensions (mm)	Hieght (mm) max	Inductance range
SPM2016	2.5*1.6	1.0~1.2	0.47uH – 2.2uH
SPM2520	2.5*2.0	1.0~1.2	0.47uH – 10uH
SPM3030	3.0*3.0	1.2	0.47uH – 10uH
SPM4040	4.0*4.0	1.2~2.0	0.1uH – 10uH
SPM5050	5.0*5.0	1.2~2.0	0.1uH – 15uH
SPM7070	7.0*7.0	1.2~5.0	0.1uH – 22uH
SPM1010	10.0*10.0	4.0	0.36uH – 68uH
SPM1313	13.0*13.0	3.5~6.0	0.15uH – 150uH



SPN / SPH Series

DARFON Item	Dimensions (mm)	Height (mm) max	Inductance range
SPH2020	2.0*2.0	1.0~1.2	0.47uH – 4.7uH
SPH2520	2.5*2.0	1.0~1.2	0.47uH – 22uH
SPH3030	3.0*3.0	1.0-~1.2	0.47uH – 22uH
SPH4040	4.0*4.0	1.0~1.8	1.0uH – 33uH
SPH5050	5.0*5.0	4.0	1.5uH – 47uH
SPH6060	6.0*6.0	1.2~4.5	0.8uH – 100uH
SPH8080	8.0*8.0	4.0	0.9uH – 22uH
SPN2016	2.0*1.6	1.0	0.47uH – 10uH
SPN2020	2.0*2.0	1.2	1.0uH – 4.7uH
SPN2424	2.4*2.4	1.0~1.2	0.47uH – 22uH
SPN2520	2.5*2.0	1.0~1.2	0.47uH – 10uH
SPN3030	3.0*3.0	1.0~1.5	1.0uH – 47uH
SPN4040	4.0*4.0	1.0~1.8	1.0uH – 220uH
SPN5050	5.0*5.0	1.0~4.0	0.47uH – 47uH
SPN6060	6.0*6.0	1.0~4.5	0.8uH – 100uH
SPN8080	8.0*8.0	3.0~4.0	0.9uH – 100uH



Molding Inductors SPM Series

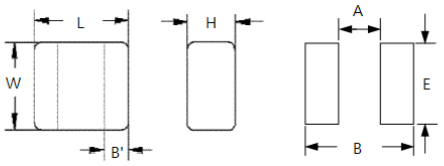
■Feature

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

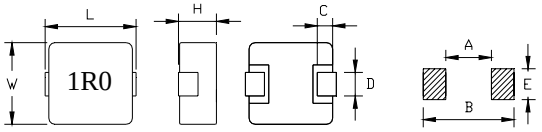
■Application

-Notebook / Desktop applications
-VGA card applications
-DC-DC Converter applications
-Low profile, high current power supplies

■Standard External Dimensions



Series	L (mm)	W (mm)	H (mm)	B' (mm)	Recommended Land Patterns			Package	
					A (mm)	B (mm)	E (mm)	Reel	Amount(pcs)
SPM2016□□□□PSA	2.0±0.2	1.6±0.2	1.0max	0.5±0.3	0.9	2.0	1.6	7”	2,000
SPM2016□□□□PSC	2.0±0.2	1.6±0.2	1.2max	0.5±0.3	0.9	2.0	1.6	7”	2,000
SPM2520□□□□PSA	2.5±0.2	2.0±0.2	1.0max	0.6±0.2	1.2	2.8	2.0	7”	2,000
SPM2520□□□□PSC	2.5±0.2	2.0±0.2	1.2max	0.6±0.2	1.2	2.8	2.0	7”	2,000



Series	L (mm)	W (mm)	H (mm)	C (mm)	D (mm)	Recommended Land Patterns			Package	
						A' (mm)	B (mm)	E (mm)	Reel	Amount(pcs)
SPM3030□□□□PSC	3.2±0.2	3.0±0.2	1.2max	0.8±0.2	1.2±0.2	1.2	4.2	2.0	7”	2,000
SPM4040□□□□ESC	4.7±0.3	4.2±0.2	1.2max	0.8±0.3	2.0±0.3	2.4	5.4	2.5	13”	3,500
SPM4040□□□□ESH	4.7±0.3	4.2±0.2	2.0max	0.8±0.3	2.0±0.3	2.4	5.4	2.5	13”	2,000
SPM4040□□□□ECH	4.7±0.3	4.2±0.2	2.0max	0.8±0.3	2.0±0.3	2.4	5.4	2.5	13”	2,000
SPM5050□□□□ESC	5.7±0.3	5.2±0.2	1.2max	1.0±0.3	2.5±0.3	3.0	7.0	3.5	13”	3,000
SPM5050□□□□ESE	5.7±0.3	5.2±0.2	1.5max	1.0±0.3	2.5±0.3	3.0	7.0	3.5	13”	3,000
SPM5050□□□□ESH	5.7±0.3	5.2±0.2	1.8max	1.0±0.3	2.5±0.3	3.0	7.0	3.5	13”	3,000
SPM5050□□□□ECL	5.7±0.3	5.2±0.2	3.0max	1.0±0.3	2.5±0.3	3.0	7.0	3.5	13”	2,000
SPM7070□□□□ESC	7.2±0.3	6.6±0.2	1.2max	1.5±0.3	3.0±0.3	4.0	8.5	3.5	13”	2,500
SPM7070□□□□ESE	7.0±0.3	6.5±0.2	1.5max	1.5±0.3	3.0±0.3	4.0	8.5	3.5	13”	2,000
SPM7070□□□□ESG	7.2±0.3	6.6±0.2	1.8max	1.5±0.3	3.0±0.3	4.0	8.5	3.5	13”	2,000
SPM7070□□□□ESL	6.95±0.35	6.6±0.2	3.0max	1.5±0.3	3.0±0.3	4.0	8.5	3.5	13”	1,500
SPM7070□□□□ERL	6.95±0.35	6.6±0.2	3.0max	1.5±0.3	3.0±0.3	4.0	8.5	3.5	13”	1,500
SPM7070□□□□ECL	6.95±0.35	6.6±0.2	3.0max	1.5±0.3	3.0±0.3	4.0	8.5	3.5	13”	1,500
SPM7070□□□□ESQ	7.2±0.3	6.6±0.2	5.0max	1.5±0.3	3.0±0.3	4.0	8.5	3.5	13	1,000
SPM1010□□□□ESN	11.2±0.3	10.0±0.3	4.0max	2.0±0.5	3.0±0.5	5.5	13.5	4.0	13”	800
SPM1010□□□□ECN	11.2±0.3	10.0±0.3	4.0max	2.0±0.5	3.0±0.5	5.5	13.5	4.0	13”	800
SPM1313□□□□ECM	13.9±0.3	12.8±0.2	3.5max	2.0±0.5	5.0±0.5	8.0	14.5	6.0	13”	500
SPM1313□□□□ESQ	13.9±0.3	12.8±0.2	5.0max	2.0±0.5	5.0±0.5	8.0	14.5	6.0	13”	500
SPM1313□□□□ESR	13.9±0.3	12.8±0.2	6.0max	2.0±0.5	5.0±0.5	8.0	14.5	6.0	13”	500

■Part Numbers & Characteristic SPM Series

SPM2016□□□□PSA (Thickness 1.0mm)

DARFON P/N	Inductance (uH)	Tolerance	DC Resistance (mΩ)		Heat Rating Current DC Amps	Saturation Current DC Amps	Measuring Condition
			Typ.	Max.	Idc(A) Typ.	Isat(A) Typ.	
SPM2016R56MPSA	0.56	± 20%	44	59	3.3	3.5	1MHz/1.0V
SPM2016R68MPSA	0.68		55	72	2.9	3.2	
SPM20161R0MPSA	1.0		80	96	2.3	2.7	
SPM20161R5MPSA	1.5		120	144	1.9	2.2	
SPM20162R2MPSA	2.2		170	204	1.4	1.9	

SPM2016□□□□PSC (Thickness 1.2mm)

DARFON P/N	Inductance (uH)	Tolerance	DC Resistance (mΩ)		Heat Rating Current DC Amps	Saturation Current DC Amps	Measuring Condition
			Typ.	Max.	Idc(A) Typ.	Isat(A) Typ.	
SPM2016R47MPSC	0.47	± 20%	40	52	3.8	4.2	1MHz/1.0V
SPM20161R0MPSC	1.0		68	82	2.7	3.1	
SPM20161R5MPSC	1.5		95	114	2.1	2.5	
SPM20162R2MPSC	2.2		160	192	1.5	2.0	

SPM2520□□□□PSA (Thickness 1.0mm)

DARFON P/N	Inductance (uH)	Tolerance	DC Resistance (mΩ)		Heat Rating Current DC Amps	Saturation Current DC Amps	Measuring Condition
			Typ.	Max.	Idc(A) Typ.	Isat(A) Typ.	
SPM2520R47MPSA	0.47	± 20%	35	46	3.6	4.4	100KHz/1.0V
SPM25201R0MPSA	1.0		45	59	3.0	3.4	
SPM25201R5MPSA	1.5		60	72	2.3	2.7	
SPM25202R2MPSA	2.2		90	108	1.8	2.4	
SPM25203R3MPSA	3.3		120	144	1.4	1.9	
SPM25204R7MPSA	4.7		200	240	1.2	1.6	

All test data are referenced to 25℃ambient.

※Isat: DC current(A) that will cause inductance to drop approximately 30%.

※Idc: DC current(A) that will cause an approximate ΔT of 40℃.

SPM2520□□□□PSC (Thickness 1.2mm)

DARFON P/N	Inductance (uH)	Tolerance	DC Resistance (mΩ)		Heat Rating Current DC Amps	Saturation Current DC Amps	Measuring Condition
			Typ.	Max.	Idc(A) Typ.	Isat(A) Typ.	
SPM2520R47MPSC	0.47	± 20%	29	35	4.0	4.1	100KHz/1.0V
SPM2520R68MPSC	0.68		38.0	45.0	3.8	3.9	
SPM25201R0MPSC	1.0		45.0	59.0	3.5	3.8	
SPM25201R5MPSC	1.5		60.0	72.0	2.8	3.3	
SPM25202R2MPSC	2.2		90.0	108.0	2.3	2.7	
SPM25203R3MPSC	3.3		120.0	144.0	1.7	2.3	
SPM25204R7MPSC	4.7		200.0	240.0	1.5	1.9	
SPM25206R0MPSC	6.0		240.0	275.0	1.3	1.7	
SPM2520100MPSC	10.0		400.0	460.0	1.0	1.3	

SPM3030□□□□PSC (Thickness 1.2mm)

DARFON P/N	Inductance (uH)	Tolerance	DC Resistance (mΩ)		Heat Rating Current DC Amps	Saturation Current DC Amps	Measuring Condition
			Typ.	Max.	Idc(A) Typ.	Isat(A) Typ.	
SPM3030R47MPSC	0.47	± 20%	21	31	4.5	6.0	100KHz/1.0V
SPM30301R0MPSC	1.0		58	65	2.8	3.4	
SPM30302R2MPSC	2.2		123	135	2.2	2.8	
SPM3030100MPSC	100		405	490	1.1	1.3	

SPM4040□□□□ESC (Thickness 1.2mm)

DARFON P/N	Inductance (uH)	Tolerance	DC Resistance (mΩ)		Heat Rating Current DC Amps	Saturation Current DC Amps	Measuring Condition
			Typ.	Max.	Idc(A) Typ.	Isat(A) Typ.	
SPM4040R47MESC	0.47	± 20%	19.0	21.0	6.0	6.8	100KHz/1.0V
SPM4040R68MESC	0.68		32.0	36.0	4.5	6.0	
SPM40401R0MESC	1.0		43.0	47.0	4.2	5.2	
SPM40401R5MESC	1.5		68.0	75.0	3.25	4.0	
SPM40402R2MESC	2.2		79.4	83.5	2.75	3.5	
SPM40403R3MESC	3.3		120.0	138.0	2.30	3.0	
SPM40404R7MESC	4.7		175.0	195.0	1.8	2.8	
SPM40406R8MESC	6.8		292.0	358.0	1.50	2.2	
SPM4040100MESC	100		394.0	465.0	1.30	1.8	

All test data are referenced to 25℃ambient.

※Isat: DC current(A) that will cause inductance to drop approximately 30%.

※Idc: DC current(A) that will cause an approximate △T of 40℃.

SPM4040□□□□ESH (Thickness 2.0mm)

DARFON P/N	Inductance (uH)	Tolerance	DC Resistance (mΩ)		Heat Rating Current DC Amps	Saturation Current DC Amps	Measuring Condition
			Typ.	Max.	Idc(A) Typ.	Isat(A) Typ.	
SPM4040R10NESH	0.10	± 30%	3.5	4.0	12.0	22.0	100KHz/1.0V
SPM4040R22MESH	0.22	± 20%	6.0	6.6	9.0	12.5	
SPM4040R47MESH	0.47		12.5	14.0	7.0	9.5	
SPM4040R56MESH	0.56		14.0	16.0	6.5	9.0	
SPM4040R68MESH	0.68		19.4	21.0	5.2	8.0	
SPM40401R0MESH	1.0		24.0	27.0	4.5	7.0	
SPM40401R5MESH	1.5		38.0	46.0	4.0	6.0	
SPM40402R2MESH	2.2		52.0	58.0	3.0	5.0	
SPM40403R3MESH	3.3		74.0	87.0	2.5	4.0	
SPM40404R7MESH	4.7		92.0	105.0	2.2	3.0	
SPM40406R8MESH	6.8		162.0	178.0	2.0	2.1	
SPM4040100MESH	10		256.0	282.0	1.6	1.8	

SPM4040□□□□ECH (Thickness 2.0mm)

DARFON P/N	Inductance (uH)	Tolerance	DC Resistance (mΩ)		Heat Rating Current DC Amps	Saturation Current DC Amps	Measuring Condition
			Typ.	Max.	Idc(A) Typ.	Isat(A) Typ.	
SPM4040R10NECH	0.10	± 30%	4.5	5.0	11.0	30.0	100KHz/1.0V
SPM4040R22MECH	0.22	± 20%	7.3	8.0	9.0	17.0	
SPM4040R47MECH	0.47		14.0	15.5	6.0	11.5	
SPM40401R0MECH	1.0		32.0	36.0	4.2	8.5	
SPM40402R2MECH	2.2		79.4	83.0	4.0	6.0	

SPM5050□□□□ESC (Thickness 1.2mm)

DARFON P/N	Inductance (uH)	Tolerance	DC Resistance (mΩ)		Heat Rating Current DC Amps	Saturation Current DC Amps	Measuring Condition
			Typ.	Max.	Idc(A) Typ.	Isat(A) Typ.	
SPM50501R0MESC	1.0	± 20%	31.3	32.9	5.0	6.0	100KHz/1.0V
SPM50502R2MESC	2.2		67.0	76.0	3.5	4.0	
SPM50503R3MESC	3.3		85.0	98.0	3.0	3.7	
SPM50504R7MESC	4.7		145.0	163.0	2.3	2.7	
SPM50506R8MESC	6.8		225.0	250.0	2.0	2.3	

All test data are referenced to 25℃ambient.

※Isat: DC current(A) that will cause inductance to drop approximately 30%.

(note: SPM4040□□□□ECH specification is defined inductance to drop approximately 20%)

※Idc: DC current(A) that will cause an approximate ΔT of 40℃.

SPM5050□□□□ESE (Thickness 1.5mm)

DARFON P/N	Inductance (uH)	Tolerance	DC Resistance (mΩ)		Heat Rating Current DC Amps	Saturation Current DC Amps	Measuring Condition
			Typ.	Max.	Idc(A) Typ.	Isat(A) Typ.	
SPM50501R0MESE	1.0	± 20%	20.0	23.0	6.5	9.0	100KHz/1.0V
SPM50501R2MESE	1.2		22.5	26.0	6.0	8.0	
SPM50502R2MESE	2.2		58.0	64.0	3.3	6.0	
SPM50503R3MESE	3.3		65.0	72.0	3.2	5.0	
SPM50504R7MESE	4.7		103	115	3.0	4.0	
SPM50506R8MESE	6.8		167	180	2.5	3.2	
SPM5050100MESE	10		220	246	2.0	3.0	
SPM5050150MESE	15		310.0	350.0	1.3	2.3	

SPM5050□□□□ESH (Thickness 2.0mm)

DARFON P/N	Inductance (uH)	Tolerance	DC Resistance (mΩ)		Heat Rating Current DC Amps	Saturation Current DC Amps	Measuring Condition
			Typ.	Max.	Idc(A) Typ.	Isat(A) Typ.	
SPM5050R10NESH	0.10	± 30%	7.7	9.0	10.5	15.5	100KHz/1.0V
SPM5050R22MESH	0.22	± 20%	4.1	4.5	12.0	20.0	
SPM5050R33MESH	0.33		5.5	5.9	11.5	16.0	
SPM5050R47MESH	0.47		8.0	10.0	10.5	15.5	
SPM5050R56MESH	0.56		8.2	10.0	9.5	13.0	
SPM5050R68MESH	0.68		10.5	13.0	9.0	12.0	
SPM50501R0MESH	1.0		15.0	17.0	8.0	9.5	
SPM50501R5MESH	1.5		21.0	24.2	6.0	9.0	
SPM50502R2MESH	2.2		30.0	35.0	5.0	6.5	
SPM50503R3MESH	3.3		52.0	58.0	4.5	5.5	
SPM50504R7MESH	4.7		78.0	85.0	3.5	4.0	
SPM50505R6MESH	5.6		85.2	92.0	3.0	2.2	
SPM50506R8MESH	6.8		107.0	120.0	2.8	3.6	
SPM5050100MESH	10		140.0	155.0	2.4	3.4	

All test data are referenced to 25℃ambient.

※Isat: DC current(A) that will cause inductance to drop approximately 30%.

※Idc: DC current(A) that will cause an approximate ΔT of 40℃.

SPM5050□□□□ECL (Thickness 3.0mm)

DARFON P/N	Inductance (uH)	Tolerance	DC Resistance (mΩ)		Heat Rating Current DC Amps	Saturation Current DC Amps	Measuring Condition
			Typ.	Max.	Idc(A) Typ.	Isat(A) Typ.	
SPM5050R68MECL	0.68	± 20%	11.0	12.0	8.5	14.0	100KHz/1.0V
SPM50501R0MECL	1.0		13.0	14.0	7.0	11.0	
SPM50501R2MECL	1.2		15.0	16.0	6.5	11.0	
SPM50501R5MECL	1.5		20.0	25.0	6.0	10.0	
SPM50502R2MECL	2.2		29.0	35.0	5.5	9.0	
SPM50503R3MECL	3.3		32.0	38.0	5.0	7.0	
SPM50504R7MECL	4.7		50.0	60.0	4.4	6.0	

SPM7070□□□□ESC (Thickness 1.2mm)

DARFON P/N	Inductance (uH)	Tolerance	DC Resistance (mΩ)		Heat Rating Current DC Amps	Saturation Current DC Amps	Measuring Condition
			Typ.	Max.	Idc(A) Typ.	Isat(A) Typ.	
SPM7070R56MESC	0.56	± 20%	13.5	15.5	7.0	11.0	100KHz/1.0V
SPM7070R68MESC	0.68		15.0	17.5	6.7	9.0	
SPM7070R82MESC	0.82		21.5	24.5	6.3	8.0	
SPM70701R0MESC	1.0		25.0	29.0	6.0	7.0	
SPM70702R2MESC	2.2		51.5	59.0	4.0	5.0	
SPM70703R3MESC	3.3		80.0	92.0	3.0	4.0	
SPM70704R7MESC	4.7		106.0	122.0	2.7	3.5	
SPM70706R8MESC	6.8		185.0	217.0	2.2	2.4	
SPM7070100MESC	10		250.0	290.0	2.0	2.2	

SPM7070□□□□ESE (Thickness 1.5mm)

DARFON P/N	Inductance (uH)	Tolerance	DC Resistance (mΩ)		Heat Rating Current DC Amps	Saturation Current DC Amps	Measuring Condition
			Typ.	Max.	Idc(A) Typ.	Isat(A) Typ.	
SPM7070R33MESE	0.33	± 20%	6.8	7.8	10.0	19.5	100KHz/1.0V
SPM7070R56MESE	0.56		9.5	11.0	9.0	14.0	
SPM7070R68MESE	0.68		10.5	12.0	8.5	12.0	
SPM7070R82MESE	0.82		15.0	17.0	7.0	10.0	
SPM70701R0MESE	1.0		18.5	21.0	5.5	9.0	
SPM70701R5MESE	1.5		37.0	42.5	5.0	7.0	
SPM70702R2MESE	2.2		46.0	54.0	3.5	6.0	
SPM70703R3MESE	3.3		54.0	63.0	3.3	5.5	

SPM70704R7MESE	4.7		76.0	85.0	3.0	5.0	
SPM70705R6MESE	5.6		96.0	118.0	2.8	4.5	
SPM70706R8MESE	6.8		125.0	135.0	2.5	4.0	
SPM7070100MESE	10		165.0	175.0	2.0	3.0	

All test data are referenced to 25℃ambient.

※Isat: DC current(A) that will cause inductance to drop approximately 30%.

(note: SPM5050□□□□ECL specification is defined inductance to drop approximately 20%)

※Idc: DC current(A) that will cause an approximate ΔT of 40℃.

SPM7070□□□□ESG (Thickness 1.8mm)

DARFON P/N	Inductance (uH)	Tolerance	DC Resistance (mΩ)		Heat Rating Current DC Amps	Saturation Current DC Amps	Measuring Condition
			Typ.	Max.	Idc(A) Typ.	Isat(A) Typ.	
SPM7070R33MESG	0.33	± 20%	5.2	6.8	12.0	22.0	100KHz/1.0V
SPM7070R47MESG	0.47		7.3	8.4	11.0	17.0	
SPM7070R68MESG	0.68		10.8	12.7	9.0	16.0	
SPM7070R82MESG	0.82		13.4	15.9	8.0	14.0	
SPM70701R0MESG	1.0		14.5	17.0	7.0	12.0	
SPM70702R2MESG	2.2		31.0	35.0	5.0	8.0	
SPM70703R3MESG	3.3		56.0	60.0	3.5	7.0	
SPM70704R7MESG	4.7		68.0	70.0	3.2	5.5	
SPM70706R8MESG	6.8		101.0	110.0	2.8	4.5	
SPM70708R2MESG	8.2		124.0	142.0	2.5	4.0	
SPM7070100MESG	10		155.0	166.0	2.0	3.0	

SPM7070□□□□ESL (Thickness 3.0mm)

DARFON P/N	Inductance (uH)	Tolerance	DC Resistance (mΩ)		Heat Rating Current DC Amps	Saturation Current DC Amps	Measuring Condition
			Typ.	Max.	Idc(A) Typ.	Isat(A) Typ.	
SPM7070R10NESL	0.10	± 30%	1.5	1.7	32.5	60.0	100KHz/1.0V
SPM7070R22MESL	0.22	± 20%	2.5	2.8	23.0	34.0	
SPM7070R33MESL	0.33		3.0	3.5	21.0	25.0	
SPM7070R47MESL	0.47		3.5	4.1	18.0	20.0	
SPM7070R56MESL	0.56		3.9	4.5	16.5	18.0	
SPM7070R68MESL	0.68		4.5	5.0	16.0	17.0	
SPM7070R82MESL	0.82		7.0	7.5	14.0	16.0	
SPM70701R0MESL	1.0		8.5	9.0	12.0	15.0	
SPM70701R5MESL	1.5		10.6	12.1	10.0	13.0	
SPM70702R2MESL	2.2		15.5	18.0	8.0	10.0	
SPM70702R5MESL	2.5		18.0	20.0	7.0	10.0	
SPM70703R3MESL	3.3		25.0	28.0	6.5	9.0	
SPM70704R7MESL	4.7		32.5	35.0	5.5	6.5	
SPM70705R6MESL	5.6		36.0	42.0	5.0	6.3	

SPM70706R8MESL	6.8		43.9	50.0	4.5	6.0	
SPM70708R2MESL	8.2		54.0	60.0	4.5	6.0	
SPM7070100MESL	10		62.0	68.0	4.0	5.5	
SPM7070220MESL	22		144.0	160.0	2.5	3.0	

All test data are referenced to 25℃ambient.

※Isat: DC current(A) that will cause inductance to drop approximately 30%.

※Idc: DC current(A) that will cause an approximate △T of 40℃.

SPM7070□□□□ERL (Thickness 3.0mm)

DARFON P/N	Inductance (uH)	Tolerance	DC Resistance (mΩ)		Heat Rating Current DC Amps	Saturation Current DC Amps	Measuring Condition
			Typ.	Max.	Idc(A) Typ.	Isat(A) Typ.	
SPM7070R82MERL	0.82	± 20%	5.2	6.0	16.0	16.0	100KHz/1.0V
SPM70701R0MERL	1.0		5.5	6.6	15.0	15.0	
SPM70701R5MERL	1.5		7.7	9.3	12.5	14.5	
SPM70702R2MERL	2.2		12.0	13.8	10.0	14.0	
SPM70703R3MERL	3.3		19.6	22.5	7.7	10.0	

SPM7070□□□□ECL (Thickness 3.0mm)

DARFON P/N	Inductance (uH)	Tolerance	DC Resistance (mΩ)		Heat Rating Current DC Amps	Saturation Current DC Amps	Measuring Condition
			Typ.	Max.	Idc(A) Typ.	Isat(A) Typ.	
SPM7070R10NECL	0.10	± 30%	1.5	1.7	32.5	60.0	100KHz/1.0V
SPM7070R22MECL	0.22	± 20%	2.5	2.8	23.0	40.0	
SPM7070R33MECL	0.33		3.5	3.9	20.0	30.0	
SPM7070R47MECL	0.47		4.0	4.2	17.5	26.0	
SPM7070R56MECL	0.56		4.7	5.0	16.5	25.5	
SPM7070R68MECL	0.68		5.0	5.5	15.5	25.0	
SPM7070R82MECL	0.82		6.7	8.0	13.0	24.0	
SPM70701R0MECL	1.0		9.0	10.0	11.0	22.0	
SPM70701R5MECL	1.5		14.0	15.0	9.0	18.0	
SPM70702R2MECL	2.2		18.0	20.0	8.0	14.0	
SPM70702R5MECL	2.5		20.0	22.0	7.0	14.0	
SPM70703R3MECL	3.3		28.0	30.0	6.0	13.5	
SPM70704R7MECL	4.7		37.0	40.0	5.5	10.0	
SPM70706R8MECL	6.8		54.0	60.0	4.5	8.0	
SPM70708R2MECL	8.2		64.0	68.0	4.0	7.5	
SPM7070100MECL	10		102.0	105.0	3.0	7.0	

All test data are referenced to 25℃ambient.

※Isat: DC current(A) that will cause inductance to drop approximately 30%.

(note: SPM7070□□□□ECL specification is defined inductance to drop approximately 20%)

※Idc: DC current(A) that will cause an approximate ΔT of 40℃.

SPM7070□□□□ESQ (Thickness 5.0mm)

DARFON P/N	Inductance (uH)	Tolerance	DC Resistance (mΩ)		Heat Rating Current DC Amps	Saturation Current DC Amps	Measuring Condition
			Typ.	Max.	Idc(A) Typ.	Isat(A) Typ.	
SPM7070R10NESQ	0.10	± 30%	0.9	1.1	43.0	48.0	100KHz/1.0V
SPM7070R22MESQ	0.22	± 20%	1.1	1.3	30.0	35.0	
SPM7070R36MESQ	0.36		2.7	3.1	21.0	25.0	
SPM7070R56MESQ	0.56		3.4	3.6	20.0	18.0	
SPM7070R68MESQ	0.68		3.3	3.6	18.0	17.0	
SPM7070R82MESQ	0.82		4.6	4.9	16.5	17.0	
SPM70701R0MESQ	1.0		4.5	5.3	14.5	16.0	
SPM70701R5MESQ	1.5		6.0	7.5	11.5	15.0	
SPM70702R2MESQ	2.2		9.0	10.2	10.5	13.5	
SPM70703R3MESQ	3.3		14.0	15	9.0	12.0	
SPM70704R7MESQ	4.7		23.0	25.0	6.5	8.0	
SPM70705R6MESQ	5.6		31.5	34.4	6.0	7.0	
SPM70706R8MESQ	6.8		31	35.5	5.5	6.5	
SPM70708R2MESQ	8.2		40.0	43.0	5.0	5.5	
SPM7070100MESQ	10		48.0	55.0	4.5	5.0	

SPM1010□□□□ESN (Thickness 4.0mm)

DARFON P/N	Inductance (uH)	Tolerance	DC Resistance (mΩ)		Heat Rating Current DC Amps	Saturation Current DC Amps	Measuring Condition
			Typ.	Max.	Idc(A) Typ.	Isat(A) Typ.	
SPM1010R36MESN	0.36	± 20%	1.1	1.3	30.0	50.0	100KHz/1.0V
SPM1010R45MESN	0.45		1.1	1.3	29.0	40.0	
SPM1010R56MESN	0.56		1.6	1.8	25.0	33.0	
SPM10101R0MESN	1.0		3.0	3.3	18.0	28.0	
SPM10101R5MESN	1.5		3.8	4.2	16.0	24.0	
SPM10102R0MESN	2.0		5.2	5.8	14.0	20.0	
SPM10102R2MESN	2.2		6.0	7.0	12.0	18.0	

SPM10103R3MESN	3.3		10.8	11.8	10.0	16.0	
SPM10104R7MESN	4.7		17.0	20.0	8.5	15.0	
SPM10105R6MESN	5.6		20.0	23.0	8.0	14.0	
SPM10106R8MESN	6.8		22.5	25.0	7.0	12.0	
SPM10108R2MESN	8.2		25.0	27.0	6.5	9.0	
SPM1010100MESN	10		27.0	30.0	6.5	8.5	
SPM1010150MESN	15		40.0	45.0	6.3	7.0	
SPM1010220MESN	22		60.0	66.0	5.0	5.5	
SPM1010330MESN	33		85.0	92.0	4.0	4.5	
SPM1010470MESN	47		130.0	145.0	3.3	3.5	
SPM1010680MESN	68		178.0	195.0	2.3	3.0	

All test data are referenced to 25℃ambient.

※Isat: DC current(A) that will cause inductance to drop approximately 30%.

※Idc: DC current(A) that will cause an approximate ΔT of 40℃.

SPM1010□□□□ECN (Thickness 4.0mm)

DARFON P/N	Inductance (uH)	Tolerance	DC Resistance (mΩ)		Heat Rating Current DC Amps	Saturation Current DC Amps	Measuring Condition
			Typ.	Max.	Idc(A) Typ.	Isat(A) Typ.	
SPM1010R36MECN	0.36	± 20%	1.1	1.3	30.0	60.0	100KHz/1.0V
SPM1010R39MECN	0.39		1.1	1.3	30.0	60.0	
SPM1010R45MECN	0.45		1.1	1.3	29.0	45.0	
SPM1010R68MECN	0.68		2.4	2.7	22.0	39.0	
SPM1010R88MECN	0.88		2.7	3.0	20.0	38.0	
SPM10101R5MECN	1.5		3.8	4.2	16.0	33.0	
SPM10102R2MECN	2.2		6.7	7.0	12.0	27.0	
SPM10103R3MECN	3.3		10.8	11.8	10.0	18.7	
SPM10104R7MECN	4.7		15.0	16.5	9.5	17.0	

SPM1313□□□□ECM (Thickness 3.5mm)

DARFON P/N	Inductance (uH)	Tolerance	DC Resistance (mΩ)		Heat Rating Current DC Amps	Saturation Current DC Amps	Measuring Condition
			Typ.	Max.	Idc(A) Typ.	Isat(A) Typ.	
SPM1313R22MECM	0.22	± 20%	1.1	1.3	38.0	65.0	100KHz/1.0V
SPM1313R33MECM	0.33		1.3	1.5	36.5	62.0	
SPM1313R47MECM	0.47		1.7	2.0	32.0	55.0	
SPM1313R56MECM	0.56		1.8	2.2	29.0	51.0	
SPM1313R68MECM	0.68		2.3	2.5	28.0	49.0	
SPM13131R0MECM	1.0		3.3	3.5	24.0	40.0	
SPM13131R5MECM	1.5		5.1	5.5	19.0	35.0	
SPM13132R2MECM	2.2		7.2	8.0	16.0	29.0	
SPM13133R3MECM	3.3		10.0	12.0	12.0	27.0	
SPM13134R7MECM	4.7		16.0	18.0	9.0	22.0	

All test data are referenced to 25℃ambient.

※Isat: DC current(A) that will cause inductance to drop approximately 30%.

(note: SPM1010□□□□ECN and SPM1313□□□□ECM specifications are defined inductance to drop approximately 20%)

※Idc: DC current(A) that will cause an approximate △T of 40℃.

SPM1313□□□□ESQ (Thickness 5.0mm)

DARFON P/N	Inductance (uH)	Tolerance	DC Resistance (mΩ)		Heat Rating Current DC Amps	Saturation Current DC Amps	Measuring Condition
			Typ.	Max.	Idc(A) Typ.	Isat(A) Typ.	
SPM1313R15MESQ	0.15	± 20%	0.38	0.45	45.0	60.0	100KHz/1.0V
SPM1313R36MESQ	0.36		0.64	0.95	41.0	55.0	
SPM1313R47MESQ	0.47		0.85	1.1	38.0	50.0	
SPM1313R56MESQ	0.56		1.1	1.3	36.0	45.0	
SPM1313R68MESQ	0.68		1.2	1.5	34.0	40.0	
SPM1313R82MESQ	0.82		1.5	1.7	31.0	34.0	
SPM13131R0MESQ	1.0		1.9	2.2	26.0	30.0	
SPM13131R5MESQ	1.5		2.8	3.2	23.0	27.0	
SPM13132R2MESQ	2.2		4.0	5.0	15.0	24.0	
SPM13133R3MESQ	3.3		5.9	7.0	14.0	22.0	
SPM1313100MESQ	10		19.0	22.0	9.0	12.0	
SPM1313220MESQ	22		51.0	58.0	4.5	6.5	
SPM1313270MESQ	27		58.0	66.0	4.0	6.3	
SPM1313330MESQ	33		75.0	84.0	3.5	6.0	
SPM1313470MESQ	47		116.0	130.0	3.0	5.0	

SPM1313□□□□ESR (Thickness 6.0mm)

DARFON P/N	Inductance (uH)	Tolerance	DC Resistance (mΩ)		Heat Rating Current DC Amps	Saturation Current DC Amps	Measuring Condition
			Typ.	Max.	Idc(A) Typ.	Isat(A) Typ.	
SPM1313R22MESR	0.22	± 20%	0.50	0.60	36.00	70.00	100KHz/1.0V
SPM1313R33MESR	0.33		0.60	0.80	35.00	65.00	

SPM1313R47MESR	0.47	0.7	0.9	34	60.00	
SPM1313R68MESR	0.68	1.00	1.20	32.00	45.00	
SPM13131R0MESR	1.00	1.60	1.90	31.00	43.00	
SPM13132R2MESR	2.20	3.30	4.10	21.00	30.00	
SPM13133R3MESR	3.30	5.30	6.40	17.00	22.00	
SPM13134R7MESR	4.7	7.2	9.0	16.00	18.0	
SPM13136R8MESR	6.8	9.5	12.0	12.0	15.0	
SPM13138R2MESR	8.2	13.6	16.0	11.0	13.5	
SPM1313100MESR	10	18.0	20.7	10.0	12.5	
SPM1313120MESR	12	20.0	23.0	7.0	10.0	
SPM1313150MESR	15	25.0	29.0	6.0	9.0	
SPM1313220MESR	22	34.0	39.5	5.0	7.5	
SPM1313270MESR	27	49.0	56.0	4.5	6.5	
SPM1313330MESR	33	65.0	75.0	4.0	6.0	
SPM1313470MESR	47	80.0	90.0	3.5	5.5	
SPM1313680MESR	68	120.0	140.0	3.0	4.5	
SPM1313101MESR	100	180.0	200.0	2.5	3.5	
SPM1313121MESR	120	210.0	235.0	2.3	3.2	
SPM1313151MESR	150	300.0	350.0	2.0	2.7	

All test data are referenced to 25℃ambient.

※Isat: DC current(A) that will cause inductance to drop approximately 30%.

※Idc: DC current(A) that will cause an approximate △T of 40℃.