

Low Profile High Current Power Inductors - SPM4012E SERIES



PART NUMBERING SYSTEM

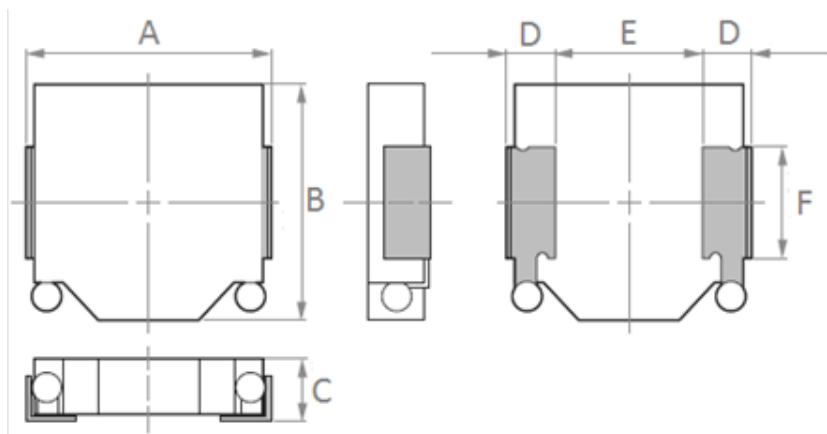
SPM	4012E	—	R68M	— LF
TYPE	DIMENSIONS		INDUCTANCE	LEAD FREE

FEATURES :

- High current and very low DCR
- Inductance range: 0.47 μ H – 4.7 μ H
- Magnetically shielded and low DC resistance and Suitable for large current .
- Excellent temperature stability for inductance and saturation with AEC-Q200 Grade 1 (–40°C to +125°C) .

SHAPES AND DIMENSIONS :

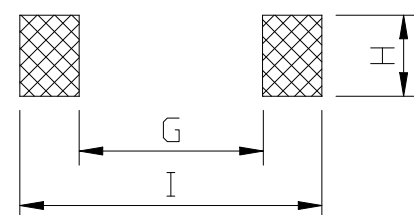
UNIT : mm



A=4.4±0.25 B=4.1±0.25 C=1.2 max. D=0.9±0.1 E=2.6 ref. F= 2.0±0.1

RECOMMENDED PATTERNS

UNIT : mm



H=2.3 G= 1.7 I = 4.9



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SPECIFICATION TABLE

PART NUMBER	INDUCTANCE (μ H) @ 100KHz	I _{sat} (A) (Max.)	I _{rms} (A) (Max.)	DCR (m Ω) (Typ.)	DCR (m Ω) (Max.)
SPM4012E-R47M-LF	0.47 \pm 20%	8.7	6.8	13.2	15.3
SPM4012E-R60M-LF	0.60 \pm 20%	8.3	5.9	16.2	18.8
SPM4012E-R68M-LF	0.68 \pm 20%	7.2	5.0	21.7	25.1
SPM4012E-1R0M-LF	1.00 \pm 20%	6.5	4.2	30.0	35.0
SPM4012E-1R5M-LF	1.50 \pm 20%	4.8	3.5	43.7	50.6
SPM4012E-2R2M-LF	2.20 \pm 20%	4.2	2.7	60.0	76.6
SPM4012E-3R3M-LF	3.30 \pm 20%	3.2	2.2	91.4	105.8
SPM4012E-4R7M-LF	4.70 \pm 20%	2.4	2.2	115.0	135.0

- I_{sat} : DC current at which the inductance drops 30% (Max.) from its value without current.
- I_{rms} : Average current for a 40°C temperature rise above 25°C ambient.
- Test Frequency at 100KHz / 0.1V
- Operating temperature range -40°C to +125°C , Electrical specifications at 25°C.