



SPS0603 SERIES ~ Shielded Power Inductors

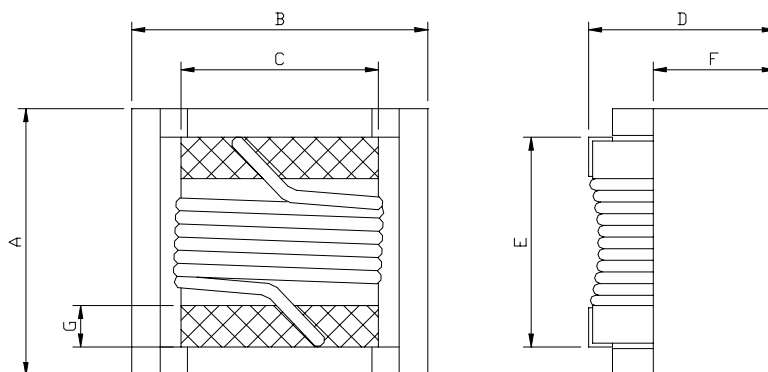
PART NUMBERING SYSTEM

RoHS Compliant

SPS	0 6 0 3	—	4 R 7 M	— LF
TYPE	DIMENSIONS		INDUCTANCE	LEAD FREE

SHAPES AND DIMENSIONS

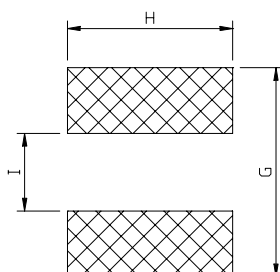
UNIT : mm



A=2.39±0.2 B=1.88±0.2 C=0.76±0.1 D=1.2±0.2 E=1.52±0.1 F=1.0±0.1
 G=0.33±0.07

RECOMMENDED PATTERNS

UNIT : mm



G=1.92±0.1 H=1.02±0.1 I=0.64±0.1

FEATURES

- **Magnetically shielded construction**
- **Only 1,52 mm high**
- **Economical alternative** to larger power inductors
- **Specially designed** for best pick and place handling
- Saturation current ratings **up to 550 mAmps**
- Inductance values from **0.78 µH to 47 µH**
- **RoHS Compliant.** 260°C compatible.



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SPECIFICATION TABLE

PART NUMBER	INDUCTANCE (μ H)	Testing Frequency	Q. Min.	DCR (Ω) (Max.)	SRF (MHz) Typ.	Isat (A)	Irms (A)
SPS0603-R78M-LF	0.78 \pm 20%	100KHz	15@1MHz	0.24	475	0.55	1.30
SPS0603-1R0M-LF	1.0 \pm 20%	100KHz	15@1MHz	0.26	390	0.40	1.00
SPS0603-1R8M-LF	1.8 \pm 20%	100KHz	15@1MHz	0.56	155	0.39	0.70
SPS0603-2R2M-LF	2.2 \pm 20%	100KHz	15@1MHz	0.75	245	0.33	0.60
SPS0603-2R7M-LF	2.7 \pm 20%	100KHz	15@1MHz	0.75	127	0.33	0.55
SPS0603-3R3M-LF	3.3 \pm 20%	100KHz	15@1MHz	0.88	72	0.32	0.50
SPS0603-3R9M-LF	3.9 \pm 20%	100KHz	15@1MHz	1.00	72	0.27	0.48
SPS0603-4R7M-LF	4.7 \pm 20%	100KHz	15@1MHz	1.08	64	0.26	0.47
SPS0603-5R6M-LF	5.6 \pm 20%	100KHz	15@1MHz	1.18	51	0.23	0.41
SPS0603-6R8M-LF	6.8 \pm 20%	100KHz	15@1MHz	1.23	39	0.23	0.40
SPS0603-8R2M-LF	8.2 \pm 20%	100KHz	20@1MHz	1.43	30	0.22	0.39
SPS0603-100M-LF	10 \pm 20%	100KHz	20@1MHz	1.60	20	0.21	0.38
SPS0603-150M-LF	15 \pm 20%	100KHz	20@1MHz	1.92	12	0.16	0.35
SPS0603-220M-LF	22 \pm 20%	100KHz	20@1MHz	2.96	16	0.13	0.27
SPS0603-330M-LF	33 \pm 20%	100KHz	20@1MHz	5.63	12	0.10	0.20
SPS0603-470M-LF	47 \pm 20%	100KHz	20@1MHz	5.69	12	0.10	0.18

- Isat: DC current at which the inductance drops 10% (typ) from its value without current.
- I rms: Average current for 40°C temperature rise from 25°C ambient .
- Operating temperature range -40°C to +105°C, Electrical specifications at 25°C.