

SPS0603 SERIES –Shielded SMD Power Inductors



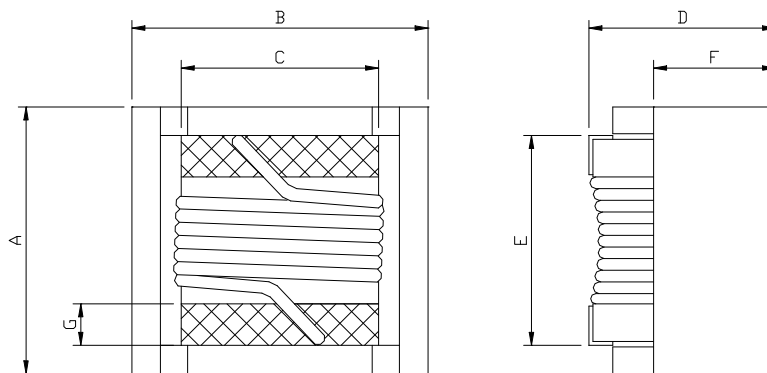
RoHS Compliant

PART NUMBERING SYSTEM

SPS	0603	—	1R0M	—	LF
TYPE	DIMENSIONS		INDUCTANCE		LEAD FREE

SHAPES AND DIMENSIONS

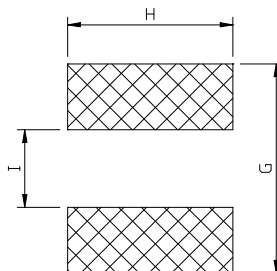
UNIT : mm



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:

- 1> Miniature SMD power chip Inductors.
- 2> Economical alternative to large power inductors.
- 3> Ideal for use at switching frequencies from 1MHz.
to 2.52MHz .
- 4> Magnetically shielded against radiation.

Applications:

Notebook computers, PC cards, wireless communication and handheld devices.

SPS0603 SERIES –Shielded SMD Power Inductors



SPECIFICATION TABLE

RoHS Compliant

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.
- Irms: Average current for 40°C temperature rise from 25°C ambient .
- Operating temperature range -40°C to +105°C, Electrical specifications at 25°C.