



# SPS0805 SERIES ~ Shielded Power Inductors



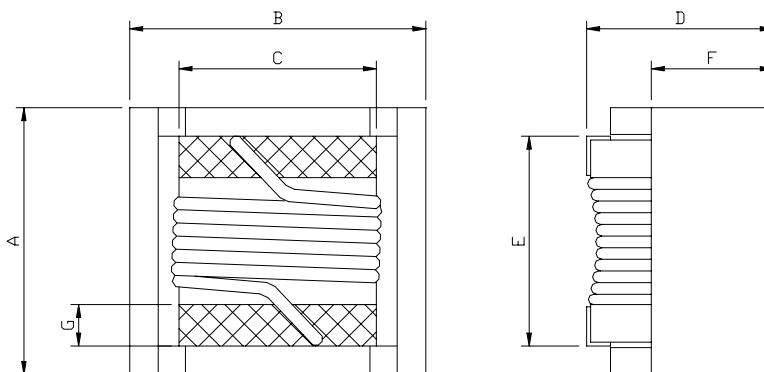
RoHS Compliant

## PART NUMBERING SYSTEM

<b>SPS</b>	<b>0805</b>	—	<b>4R7M</b>	—	<b>LF</b>
TYPE	DIMENSIONS		INDUCTANCE		LEAD FREE

## SHAPES AND DIMENSIONS

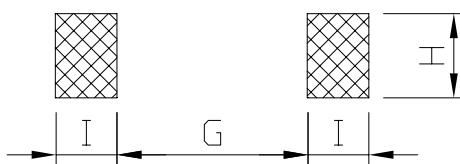
UNIT : mm



A=3.38 Max. B=3.0 Max. C=2.03 Ref. D=2.00 Max. E=1.27 Ref. F=0.51 Ref.

## RECOMMENDED PATTERNS

UNIT : mm



G=0.76 Ref. H=1.78 Ref. I=1.02 Ref.

## FEATURES:

- Magnetically shielded
- Only 2.0 mm high
- Economical alternative to larger power inductors
- Specially designed for best pick and place handling
- Saturation current ratings up to 900 mAmps
- Inductance values from 1  $\mu$ H to 220  $\mu$ H



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### SPECIFICATION TABLE

PART NUMBER	INDUCTANCE ( $\mu$ H)	Q. MIN.	DCR ( $\Omega$ ) (Max)	SRF (MHz) Typ.	Isat (A)	Irms (A)
SPS0805-1R0M-LF	1.0 $\pm$ 20%	21@1MHz	0.14	340	0.90	1.80
SPS0805-1R8M-LF	1.5 $\pm$ 20%	21@1MHz	0.18	265	0.85	1.43
SPS0805-2R7M-LF	2.7 $\pm$ 20%	21@1MHz	0.33	190	0.60	1.00
SPS0805-3R3M-LF	3.3 $\pm$ 20%	21@1MHz	0.46	180	0.55	0.83
SPS0805-3R9M-LF	3.9 $\pm$ 20%	21@1MHz	0.72	165	0.50	0.71
SPS0805-4R7M-LF	4.7 $\pm$ 20%	21@1MHz	0.81	155	0.43	0.65
SPS0805-5R6M-LF	5.6 $\pm$ 20%	21@1MHz	0.91	143	0.38	0.61
SPS0805-6R8M-LF	6.8 $\pm$ 20%	21@1MHz	1.25	118	0.32	0.51
SPS0805-100M-LF	10 $\pm$ 20%	21@1MHz	1.45	66	0.27	0.48
SPS0805-150M-LF	15 $\pm$ 20%	21@1MHz	1.90	34	0.22	0.41
SPS0805-220M-LF	22 $\pm$ 20%	25@1MHz	2.48	22	0.18	0.36
SPS0805-330M-LF	33 $\pm$ 20%	25@1MHz	3.00	17	0.16	0.33
SPS0805-470M-LF	47 $\pm$ 20%	25@1MHz	3.65	15	0.15	0.29
SPS0805-680M-LF	68 $\pm$ 20%	28@1MHz	4.42	12	0.12	0.27
SPS0805-820M-LF	82 $\pm$ 20%	30@1MHz	6.00	12	0.11	0.23
SPS0805-101M-LF	100 $\pm$ 20%	32@1MHz	6.45	9	0.10	0.21
SPS0805-151M-LF	150 $\pm$ 20%	32@1MHz	7.70	5	0.08	0.20
SPS0805-221M-LF	220 $\pm$ 20%	32@1MHz	12.0	5	0.07	0.13

- Inductance are tested by HP4284A with SMD test fixture at 100KHz, 0.1Vrms.
- Q value are tested by HP4287A with 16193 SMD test fixture at 1MHz, 0.1 Vrms.
- DCR measured on HP4338 micro-ohmmete.
- Isat : Inductance is 10% lower than it's nominal value in DC saturation characteristics.
- Irms : temperature raise becomes  $\Delta T = 40^{\circ} C$ .
- Operating temperature range  $-40^{\circ} C$  to  $+85^{\circ} C$ . Electrical specifications at  $25^{\circ} C$ .