

## SPS1008 SERIES ~ Power Chip Inductors



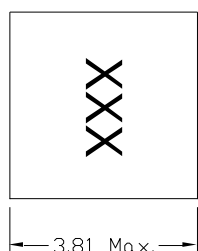
### PART NUMBERING SYSTEM

<b>SPS</b>	<b>1008</b>	—	<b>1R0M</b>	—	<b>LF</b>
TYPE	DIMENSIONS		INDUCTANCE		LEAD FREE

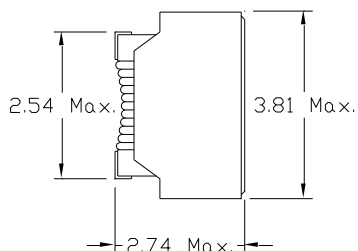
### SHAPES AND DIMENSIONS

UNIT : mm

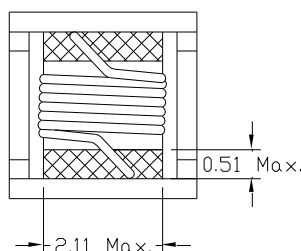
TOP VIEW



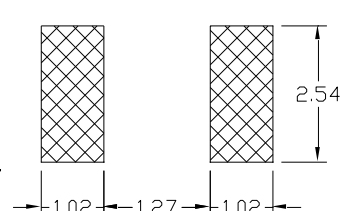
FRONT VIEW



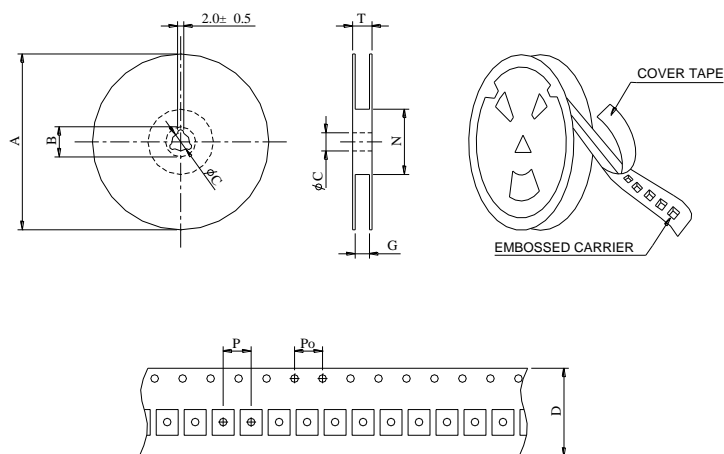
BOTTOM VIEW



PCB PATTERN



### PACKAGING SPECIFICATION



SERIES	STAYLE	Q'TY (PCS)	DIMENSIONS (m/m)								
			A	B±0.8	C±0.5	D	G <sup>+</sup>	N <sup>0</sup>	P	Po	T
SPS1008	13-24	2,500	330	21	13	12	12.4	50	8	4	18.4

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### SPECIFICATION TABLE

PART NUMBER	INDUCTANCE ( $\mu$ H)	Testing Frequency	Q. Min.	DCR ( $\Omega$ ) (Max.)	SRF (MHz) Typ.	Isat (A)	Irms (A)
SPS1008-1R0M-LF	1.0 $\pm$ 20%	100KHz	35@1MHz	0.05	344	3.0	2.00
SPS1008-1R5M-LF	1.5 $\pm$ 20%	100KHz	35@1MHz	0.06	260	2.8	2.00
SPS1008-1R8M-LF	1.8 $\pm$ 20%	100KHz	35@1MHz	0.09	225	2.1	1.90
SPS1008-2R7M-LF	2.7 $\pm$ 20%	100KHz	38@1MHz	0.14	185	1.3	1.60
SPS1008-3R9M-LF	3.9 $\pm$ 20%	100KHz	38@1MHz	0.26	175	1.2	1.20
SPS1008-4R7M-LF	4.7 $\pm$ 20%	100KHz	38@1MHz	0.35	160	1.0	1.10
SPS1008-5R6M-LF	5.6 $\pm$ 20%	100KHz	38@1MHz	0.36	150	1.0	0.90
SPS1008-6R8M-LF	6.8 $\pm$ 20%	100KHz	38@1MHz	0.58	120	0.84	0.80
SPS1008-100M-LF	10 $\pm$ 20%	100KHz	38@1MHz	0.92	105	0.78	0.72
SPS1008-150M-LF	15 $\pm$ 20%	100KHz	38@1MHz	1.15	35	0.70	0.60
SPS1008-220M-LF	22 $\pm$ 20%	100KHz	40@1MHz	1.40	26	0.65	0.55
SPS1008-330M-LF	33 $\pm$ 20%	100KHz	45@1MHz	1.61	20	0.51	0.20
SPS1008-390M-LF	39 $\pm$ 20%	100KHz	45@1MHz	1.85	16	0.45	0.47
SPS1008-470M-LF	47 $\pm$ 20%	100KHz	45@1MHz	2.5	19	0.40	0.42
SPS1008-680M-LF	68 $\pm$ 20%	100KHz	45@1MHz	3.8	12	0.31	0.32
SPS1008-820M-LF	82 $\pm$ 20%	100KHz	45@1MHz	4.3	9.0	0.30	0.30
SPS1008-101M-LF	100 $\pm$ 20%	100KHz	45@1MHz	5.8	7.0	0.30	0.30
SPS1008-121M-LF	120 $\pm$ 20%	100KHz	50@1MHz	6.3	7.0	0.25	0.28
SPS1008-151M-LF	150 $\pm$ 20%	100KHz	50@1MHz	7.5	5.8	0.22	0.26
SPS1008-221M-LF	220 $\pm$ 20%	100KHz	55@1MHz	10.0	10.3	0.22	0.21
SPS1008-331M-LF	330 $\pm$ 20%	100KHz	55@1MHz	11.5	3.8	0.20	0.19
SPS1008-471M-LF	470 $\pm$ 20%	100KHz	55@1MHz	16.3	3.1	0.16	0.18
SPS1008-561M-LF	560 $\pm$ 20%	100KHz	55@1MHz	18.1	2.8	0.13	0.15
SPS1008-681M-LF	680 $\pm$ 20%	100KHz	55@1MHz	24.0	2.5	0.12	0.14
SPS1008-821M-LF	820 $\pm$ 20%	100KHz	45@1MHz	26.0	1.5	0.10	0.12
SPS1008-102M-LF	1000 $\pm$ 20%	100KHz	45@1MHz	29.0	2.0	0.10	0.11

- 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.
- Packing : 7" reel, machine-ready ,embossed plastic tape ( 750 parts per full reel)  
 13" reel, machine-ready ,embossed plastic tape ( 2,500 parts per full reel).