



# SDS5022 SERIES ~ SMD Shielded Power Inductors



RoHS Compliant

## PART NUMBERING SYSTEM

<b>SDS</b>	<b>5 0 2 2</b>	—	<b>1 R 0 M</b>	—	<b>LF</b>
TYPE	DIMENSIONS		INDUCTANCE		LEAD FREE

## SHAPES AND DIMENSIONS

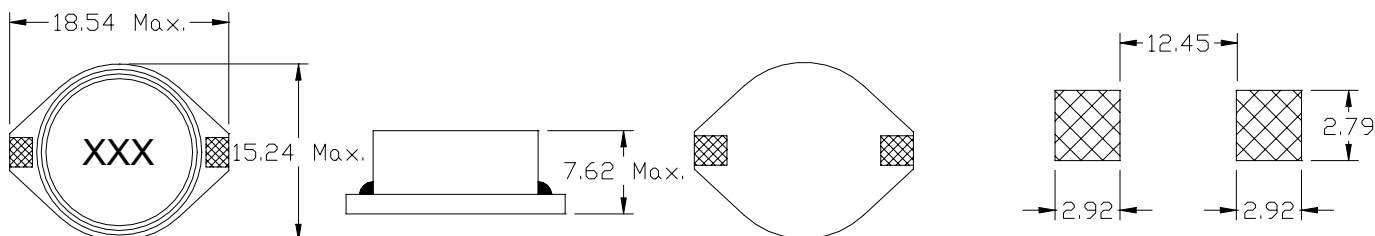
UNIT : mm

TOP VIEW

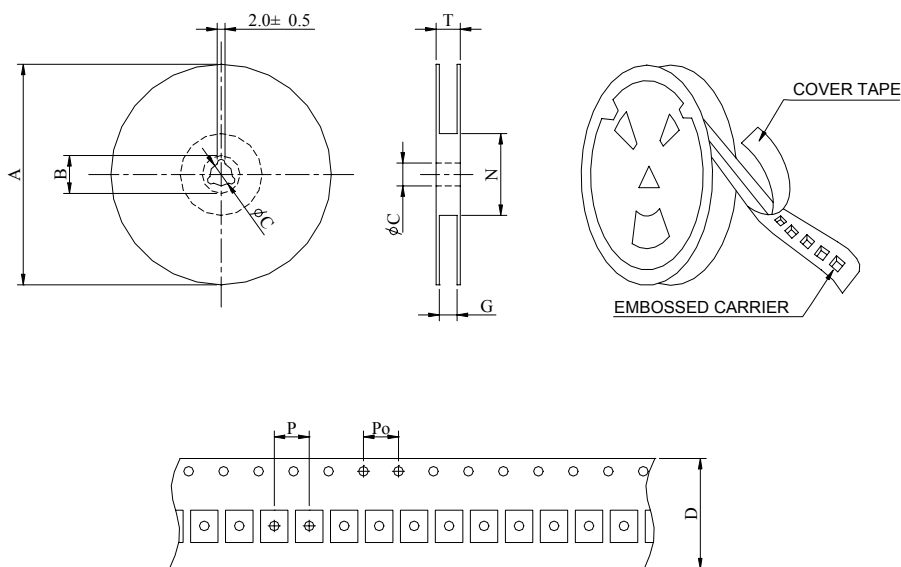
FRONT VIEW

BOTTOM VIEW

PCB PATTERN



## PACKAGING SPECIFICATION



SERIES	STAYLE	Q' TY (PCS)	DIMENSIONS (m/m)								
			A	B	C±0.5	D	G <sup>+0</sup>	N±2.0	P±0.1	Po	T
SDS5022	13-32	250	330	—	13.5	32	34	75	20	4	—



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### SPECIFICATION TABLE

PART NUMBER	INDUCTANCE ( $\mu$ H)	DCR ( $\Omega$ ) (Max.)	I <sub>sat</sub> ( A ) (Max.)	I <sub>rms</sub> ( A ) (Max.)	SRF(MHz) (Ref.)
SDS5022-1R0M-LF	1.0 $\pm$ 20%	0.016	18.0	18.0	6.5
SDS5022-2R2M-LF	1.5 $\pm$ 20%	0.023	14.0	14.0	5.0
SDS5022-3R3M-LF	2.2 $\pm$ 20%	0.026	12.5	12.5	4.7
SDS5022-4R7M-LF	3.3 $\pm$ 20%	0.028	11.5	11.5	4.4
SDS5022-5R6M-LF	4.7 $\pm$ 20%	0.030	10.8	10.8	4.1
SDS5022-100M-LF	10 $\pm$ 20%	0.040	8.0	8.0	3.9
SDS5022-150M-LF	15 $\pm$ 20%	0.048	7.0	7.0	3.4
SDS5022-220M-LF	22 $\pm$ 20%	0.059	6.0	6.0	3.1
SDS5022-330M-LF	33 $\pm$ 20%	0.075	5.0	5.0	2.8
SDS5022-470M-LF	47 $\pm$ 20%	0.097	4.0	4.0	2.4
SDS5022-680M-LF	68 $\pm$ 20%	0.138	3.0	3.0	2.0
SDS5022-101M-LF	100 $\pm$ 20%	0.207	2.4	2.4	1.7
SDS5022-151M-LF	150 $\pm$ 20%	0.293	2.1	2.1	1.3
SDS5022-221M-LF	220 $\pm$ 20%	0.47	1.9	1.9	1.1
SDS5022-271M-LF	270 $\pm$ 20%	0.64	1.4	1.4	0.95
SDS5022-331M-LF	330 $\pm$ 20%	0.78	1.1	1.1	0.86
SDS5022-471M-LF	470 $\pm$ 20%	1.08	1.1	1.1	0.73
SDS5022-681M-LF	680 $\pm$ 20%	1.40	0.96	0.96	0.64
SDS5022-821M-LF	820 $\pm$ 20%	1.70	0.88	0.88	0.58
SDS5022-102M-LF	1000 $\pm$ 20%	2.01	0.80	0.80	0.53

- Inductance tested at 100 kHz, 0.1 Vrms.
- I<sub>sat</sub> : DC current at which the inductance drops 10% (typ) from its value without current.
- I<sub>rms</sub> : Average current for 40°C temperature rise from 25°C ambient.
- Operating temperature range -40°C to +85°C , Electrical specifications at 25°C .
- Packing : 13" reel, machine-ready ,embossed plastic tape ( 250 parts per full reel).

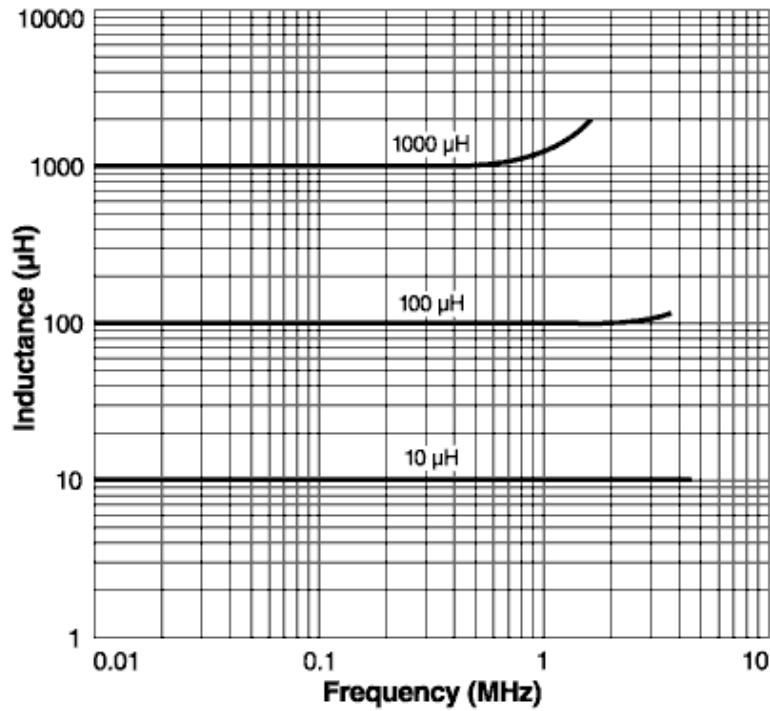


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### TYPICAL INDUCTANCE VS. FREQUENCY



### TYPICAL INDUCTANCE VS. CURRENT

