



SDS127Q SERIES ~ SMD Shielded Coupled Inductors

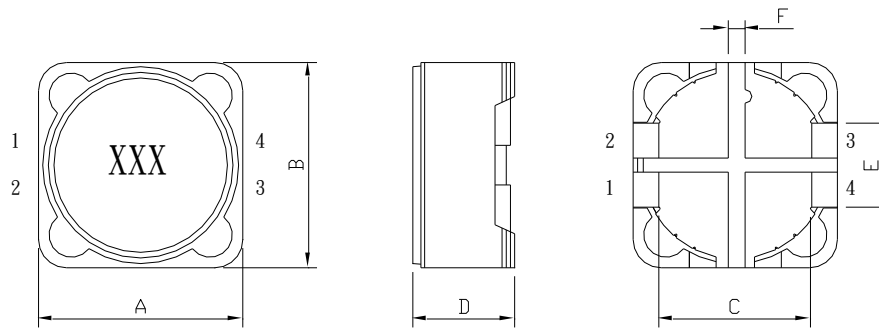


PART NUMBERING SYSTEM

SDS	127Q	—	680M	—	LF
TYPE	DIMENSIONS		INDUCTANCE		LEAD FREE

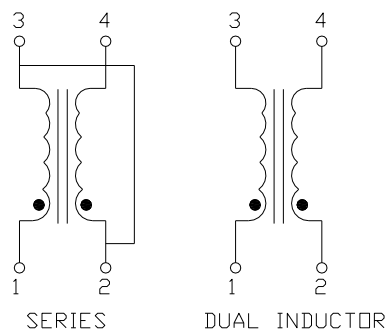
SHAPES AND DIMENSIONS

UNIT : mm

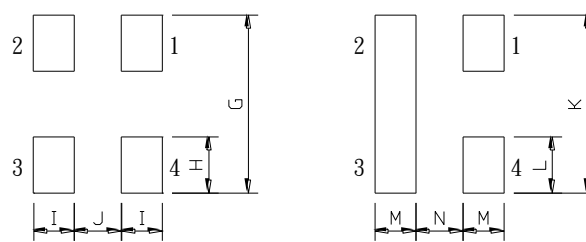


A=12.5 Max. B=12.5 Max. C=7.8 Ref. D=8.0 Max. E=5.0 Ref. F=2.0 Ref.

SCHEMATIC DRAWING



PCB PATTERN



Dual Inductor Mode

Series Mode

G=13.8 H=3.85 I=2.5 J=0.5 K=13.8 L=3.85 M=2.5 N=0.5



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SPECIFICATION TABLE

TYPE		Parallel Ratings				Series ratings			
PART NUMBER	INDUCTANCE (μ H)	OCL \pm 20% (μ H)	I rms (A)	I sat (A)	DCR (Ω) (Max.)	OCL \pm 25% (μ H)	I rms (A)	I sat (A)	DCR (Ω) (Max.)
SDS127Q-R47M-LF	0.47	0.419	17.9	56.0	0.00244	1.676	8.94	28	0.0098
SDS127Q-1R0M-LF	1.00	0.821	15.5	40.0	0.00326	3.284	7.74	20	0.0130
SDS127Q-1R5M-LF	1.50	1.357	13.5	31.1	0.00426	5.428	6.77	15.6	0.0171
SDS127Q-2R2M-LF	2.20	2.027	12.5	25.5	0.00466	8.108	6.23	12.7	0.0201
SDS127Q-3R3M-LF	3.30	2.831	10.4	21.5	0.00709	11.32	5.23	10.8	0.0286
SDS127Q-4R7M-LF	4.70	4.841	8.25	16.5	0.01146	19.36	4.13	8.24	0.0459
SDS127Q-6R8M-LF	6.80	7.387	7.34	13.3	0.0145	29.55	3.67	6.67	0.0581
SDS127Q-8R2M-LF	8.20	8.861	6.32	12.2	0.0196	35.44	3.16	6.09	0.0784
SDS127Q-100M-LF	10.0	10.47	6.04	11.2	0.0215	41.88	3.02	5.60	0.0858
SDS127Q-150M-LF	15.0	14.09	5.03	9.66	0.0309	56.36	2.51	4.83	0.1238
SDS127Q-220M-LF	22.0	22.93	4.00	7.57	0.0489	91.72	2.00	3.78	0.1963
SDS127Q-330M-LF	33.0	33.92	3.23	6.22	0.0750	135.7	1.61	3.11	0.3013
SDS127Q-470M-LF	47.0	47.05	2.95	5.28	0.0899	188.2	1.47	2.64	0.3600
SDS127Q-680M-LF	68.0	66.48	2.44	4.44	0.1313	265.9	1.22	2.22	0.5263
SDS127Q-820M-LF	82.0	79.75	2.09	4.06	0.1788	319.0	1.04	2.03	0.7163
SDS127Q-101M-LF	100	99.31	1.96	3.64	0.2038	397.2	0.980	1.82	0.8163
SDS127Q-151M-LF	150	144.9	1.59	3.01	0.3088	579.6	0.796	1.51	1.2363
SDS127Q-221M-LF	220	221.5	1.29	2.43	0.4700	866.0	0.645	1.22	1.88
SDS127Q-331M-LF	330	323.6	1.04	2.01	0.7175	1294	0.522	1.01	2.88
SDS127Q-471M-LF	470	467.1	0.85	1.68	1.0763	1868	0.427	0.838	4.30
SDS127Q-681M-LF	680	676.7	0.76	1.39	1.3500	2707	0.380	0.697	5.40
SDS127Q-821M-LF	820	818.1	0.65	1.27	1.8376	3272	0.325	0.633	7.35
SDS127Q-102M-LF	1000	1005	0.61	1.14	2.0750	4020	0.307	0.571	8.30

- Inductors tolerance M \pm 20%.
- I sat : DC current at which the inductance drops 30% (typ) from its value without current.
- Operating temperature range -40°C to +125°C .
- Electrical specifications at 20°C .

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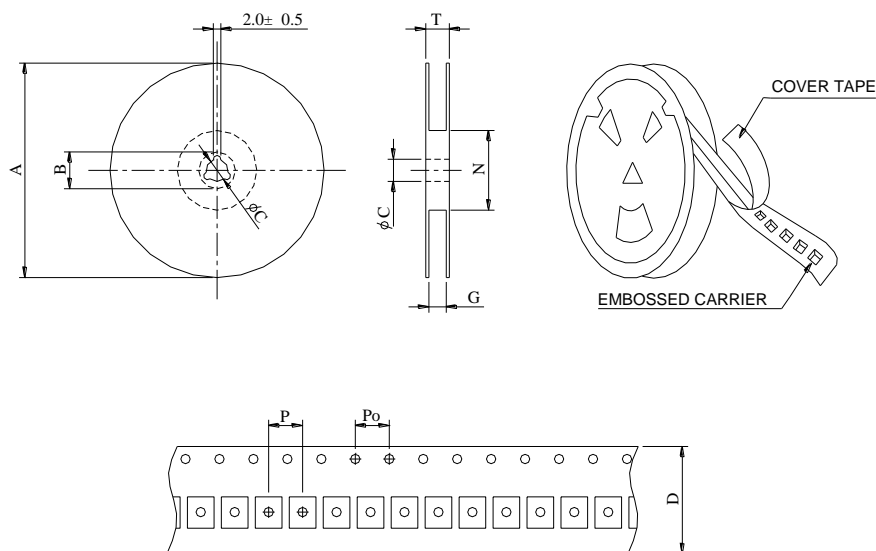
Description

- 125°C maximum total temperature operation .
- Dual winding inductors that can be used as either a single inductor , or in coupled inductor/ transformer Application (1 : 1 turns ratio)
- Winding can be connected in series or parallel , offering a broad range of inductance and current ratings .
- 200 VAC isolation between windings
- RoHS compliant

Applications

- As a transformer : SEPIC , flyback
- DC/DC converters
- As an inductor : Buck, boost , coupled inductor .
- VRM inductor for CPU and DDR power supplies .
- Input and output filter chokes .

PACKAGING SPECIFICATION



SERIES	STAYLE	Q'TY (PCS)	DIMENSIONS (m/m)								
			A	B±0.8	C±0.5	D	G ⁺⁰	N ⁻⁰	P	Po	T
SDS127Q	13-24	400	330	21	13	24	26	50	20	4	30.4