



Shielded Coupled Power Inductors-SDS127BQ-A SERIES



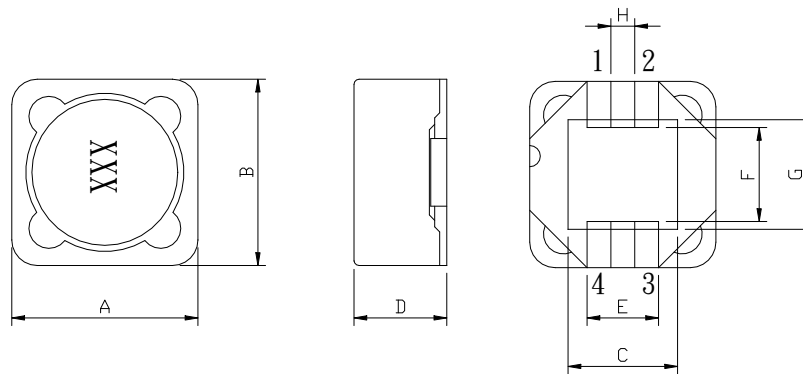
PART NUMBERING SYSTEM

(AEC-Q200)

SDS	127BQ	—	331M	—	LF	—	A
TYPE	DIMENSIONS		INDUCTANCE		LEAD FREE		Automotive

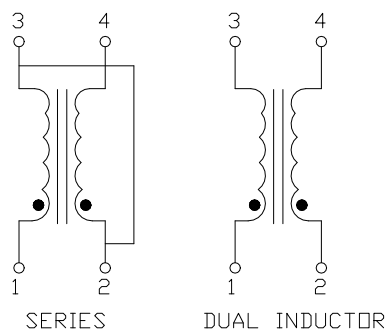
SHAPES AND DIMENSIONS

UNIT : mm

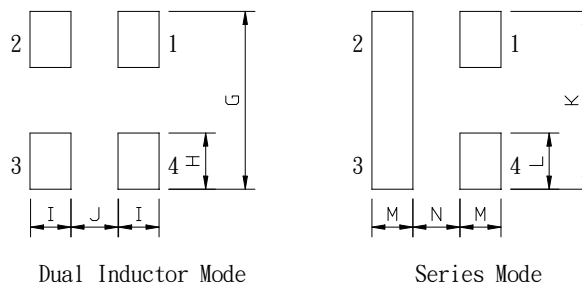


A=12.5 Max. B=12.5 Max. C=7.0 Ref. D=8.0 Max. E=5.0 Ref. F=5.7±0.05 G=7.2 Ref. H=1.8 Ref.

SCHEMATIC DRAWING



PCB PATTERN



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

(AEC-Q200)

TYPE PART NUMBER	INDUCTANCE (μ H)	Parallel Ratings				Series ratings			
		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.)
SDS127BQ-R47M-LF-A	0.47	0.419	17.9	56.0	0.00244	1.676	8.94	28	0.0098
SDS127BQ-1R0M-LF-A	1.00	0.821	15.5	40.0	0.00326	3.284	7.74	20	0.0130
SDS127BQ-1R5M-LF-A	1.50	1.357	13.5	31.1	0.00426	5.428	6.77	15.6	0.0171
SDS127BQ-2R2M-LF-A	2.20	2.027	12.5	25.5	0.00466	8.108	6.23	12.7	0.0201
SDS127BQ-3R3M-LF-A	3.30	2.831	10.4	21.5	0.00709	11.32	5.23	10.8	0.0286
SDS127BQ-4R7M-LF-A	4.70	4.841	8.25	16.5	0.01146	19.36	4.13	8.24	0.0459
SDS127BQ-6R8M-LF-A	6.80	7.387	7.34	13.3	0.0145	29.55	3.67	6.67	0.0581
SDS127BQ-8R2M-LF-A	8.20	8.861	6.32	12.2	0.0196	35.44	3.16	6.09	0.0784
SDS127BQ-100M-LF-A	10.0	10.47	6.04	11.2	0.0215	41.88	3.02	5.60	0.0858
SDS127BQ-150M-LF-A	15.0	14.09	5.03	9.66	0.0309	56.36	2.51	4.83	0.1238
SDS127BQ-220M-LF-A	22.0	22.93	4.00	7.57	0.0489	91.72	2.00	3.78	0.1963
SDS127BQ-330M-LF-A	33.0	33.92	3.23	6.22	0.0750	135.7	1.61	3.11	0.3013
SDS127BQ-470M-LF-A	47.0	47.05	2.95	5.28	0.0899	188.2	1.47	2.64	0.3600
SDS127BQ-680M-LF-A	68.0	66.48	2.44	4.44	0.1313	265.9	1.22	2.22	0.5263
SDS127BQ-820M-LF-A	82.0	79.75	2.09	4.06	0.1788	319.0	1.04	2.03	0.7163
SDS127BQ-101M-LF-A	100	99.31	1.96	3.64	0.2038	397.2	0.980	1.82	0.8163
SDS127BQ-151M-LF-A	150	144.9	1.59	3.01	0.3088	579.6	0.796	1.51	1.2363
SDS127BQ-221M-LF-A	220	221.5	1.29	2.43	0.4700	866.0	0.645	1.22	1.88
SDS127BQ-331M-LF-A	330	323.6	1.04	2.01	0.7175	1294	0.522	1.01	2.88
SDS127BQ-471M-LF-A	470	467.1	0.85	1.68	1.0763	1868	0.427	0.838	4.30
SDS127BQ-681M-LF-A	680	676.7	0.76	1.39	1.3500	2707	0.380	0.697	5.40
SDS127BQ-821M-LF-A	820	818.1	0.65	1.27	1.8376	3272	0.325	0.633	7.35
SDS127BQ-102M-LF-A	1000	1005	0.61	1.14	2.0750	4020	0.307	0.571	8.30

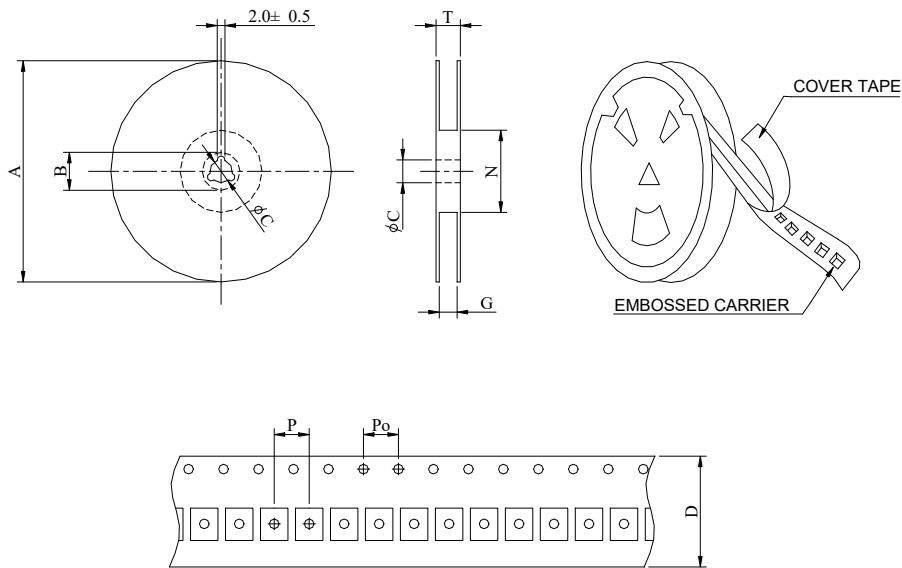
- Inductors tolerance $M=\pm 20\%$.
- I sat : DC current at which the inductance drops 30% (typ.) from its value without current.
- Operating temperature range -40°C to $+125^{\circ}\text{C}$.
- Electrical specifications at 25°C .

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PACKAGING SPECIFICATION

(AEC-Q200)



SERIES	STAYLE	Q'TY (PCS)	DIMENSIONS (m/m)								
			A	B±0.8	C±0.5	D	G ⁺⁰	N ⁰	P	Po	T
SDS127BQ-A	13-24	400	330	21	13	24	26	50	20	4	30.4