

High Current Surface Mount Power Inductors - SDR705K-A SERIES



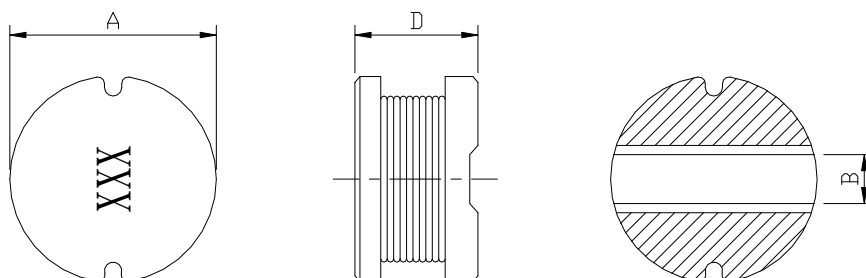
PART NUMBERING SYSTEM

(AEC-Q200)

SDR	0705K	—	331K	—	LF	—	A
TYPE	DIMENSIONS		INDUCTANCE		LEAD FREE		Automotive

SHAPES AND DIMENSIONS

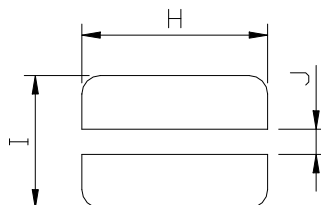
UNIT : mm



A=7.8 Max. B=2.6 Typ. D=5.3 Max.

RECOMMENDED PATTERNS

UNIT : mm



H=8.0 Max. I=8.0 Max. J=2.6 Max.

FEATURES

- Available for lead free and RoHS compliant
- Excellent solder ability and high heat resistance
- Inductance value from 1.5uH to 4,700uH
- Excellent terminal strength constructions
- Small diameter of only 7.8mm maximum and low profile of 5.3mm max.

APPLICATION

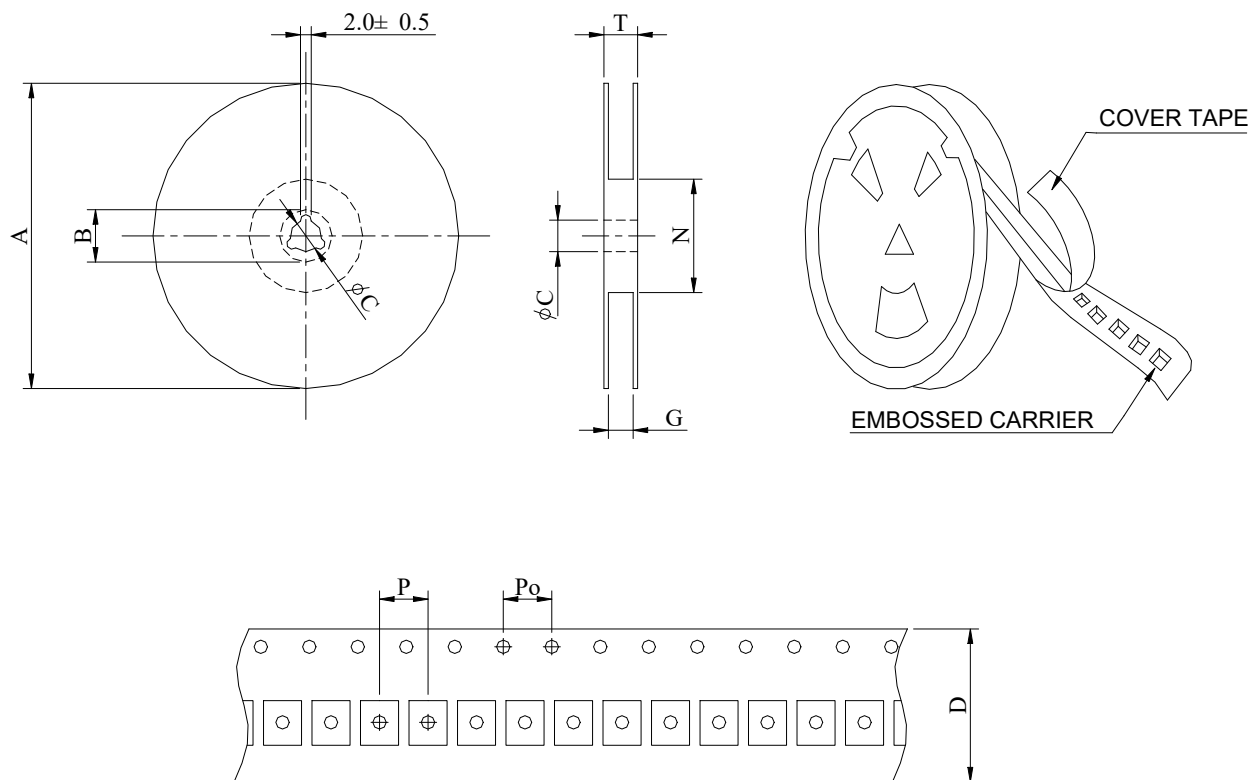
- Input / output of DC/DC converters
- Power supplies for LCD TVs , Car radios , Camcorders , Portable communication equipment

SPECIFICATION TABLE

PART NUMBER	INDUCTANCE (μ H)	Q (Ref.)	DCR (Ω) (Max.)	IDC (A) (Max.)	TEST FREQ. (MHz)
SDR0705K-1R5M-LF-A	1.5 $\pm$ 20%	32	0.02	9.10	7.96
SDR0705K-2R5M-LF-A	2.5 $\pm$ 20%	32	0.02	7.20	7.96
SDR0705K-3R3M-LF-A	3.3 $\pm$ 20%	32	0.02	6.30	7.96
SDR0705K-3R9M-LF-A	3.9 $\pm$ 20%	32	0.02	5.70	7.96
SDR0705K-4R7M-LF-A	4.7 $\pm$ 20%	31	0.03	5.00	7.96
SDR0705K-5R6M-LF-A	5.6 $\pm$ 20%	31	0.04	4.60	7.96
SDR0705K-6R8M-LF-A	6.8 $\pm$ 20%	30	0.04	4.10	7.96
SDR0705K-7R5M-LF-A	7.5 $\pm$ 20%	29	0.05	3.70	7.96
SDR0705K-100M-LF-A	10 $\pm$ 20%	25	0.07	3.20	2.52
SDR0705K-120M-LF-A	12 $\pm$ 20%	25	0.08	3.00	2.52
SDR0705K-150M-LF-A	15 $\pm$ 20%	25	0.09	2.70	2.52
SDR0705K-180M-LF-A	18 $\pm$ 20%	20	0.10	2.60	2.52
SDR0705K-220M-LF-A	22 $\pm$ 20%	20	0.11	2.30	2.52
SDR0705K-270K-LF-A	27 $\pm$ 10%	20	0.12	2.10	2.52
SDR0705K-330K-LF-A	33 $\pm$ 10%	15	0.14	1.90	2.52
SDR0705K-390K-LF-A	39 $\pm$ 10%	15	0.16	1.70	2.52
SDR0705K-470K-LF-A	47 $\pm$ 10%	15	0.20	1.60	2.52
SDR0705K-560K-LF-A	56 $\pm$ 10%	15	0.24	1.50	2.52
SDR0705K-680K-LF-A	68 $\pm$ 10%	15	0.30	1.30	2.52
SDR0705K-820K-LF-A	82 $\pm$ 10%	12	0.37	1.20	2.52
SDR0705K-101K-LF-A	100 $\pm$ 10%	12	0.45	1.10	0.796
SDR0705K-121K-LF-A	120 $\pm$ 10%	12	0.48	1.00	0.796
SDR0705K-151K-LF-A	150 $\pm$ 10%	12	0.68	0.85	0.796
SDR0705K-181K-LF-A	180 $\pm$ 10%	12	0.77	0.80	0.796
SDR0705K-221K-LF-A	220 $\pm$ 10%	12	0.96	0.80	0.796
SDR0705K-271K-LF-A	270 $\pm$ 10%	12	1.11	0.66	0.796
SDR0705K-331K-LF-A	330 $\pm$ 10%	12	1.26	0.58	0.796
SDR0705K-391K-LF-A	390 $\pm$ 10%	12	1.77	0.55	0.796
SDR0705K-471K-LF-A	470 $\pm$ 10%	12	1.96	0.50	0.796
SDR0705K-561K-LF-A	560 $\pm$ 10%	30	2.50	0.46	0.796
SDR0705K-681K-LF-A	680 $\pm$ 10%	29	2.80	0.42	0.796
SDR0705K-821K-LF-A	820 $\pm$ 10%	28	4.00	0.35	0.796
SDR0705K-102K-LF-A	1000 $\pm$ 10%	27	4.50	0.34	0.252
SDR0705K-122K-LF-A	1200 $\pm$ 10%	28	6.80	0.28	0.252
SDR0705K-152K-LF-A	1500 $\pm$ 10%	27	8.00	0.26	0.252
SDR0705K-182K-LF-A	1800 $\pm$ 10%	30	9.20	0.23	0.252
SDR0705K-222K-LF-A	2200 $\pm$ 10%	29	10.00	0.20	0.252
SDR0705K-272K-LF-A	2700 $\pm$ 10%	31	11.80	0.18	0.252
SDR0705K-332K-LF-A	3300 $\pm$ 10%	28	16.50	0.17	0.252
SDR0705K-392K-LF-A	3900 $\pm$ 10%	28	18.00	0.16	0.252
SDR0705K-472K-LF-A	4700 $\pm$ 10%	30	21.00	0.15	0.252

- DC current at which the inductance drops 10% (typ) from its value without current.
- Operating temperature range -40°C to +125°C , Electrical specifications at 25°C.

PACKAGING SPECIFICATION



SERIES	Q'TY (PCS)	DIMENSIONS (m/m)								
		A	B±0.8	C±0.5	D	G ⁺⁰	N ⁻⁰	P	Po	T
SDR0705K-A	1000	330	21	13	16	18	50	12	4	22.4