

## SMD Power Inductors - SDR0905K SERIES



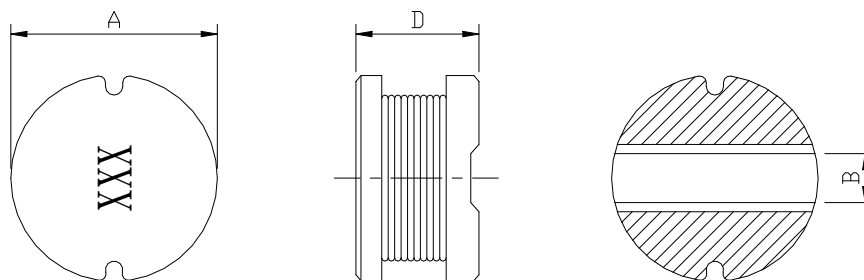
### PART NUMBERING SYSTEM

(AEC-Q200)

<b>SDR</b>	<b>0905K</b>	—	<b>681K</b>	—	<b>LF</b>
TYPE	DIMENSIONS		INDUCTANCE		LEAD FREE

### SHAPES AND DIMENSIONS

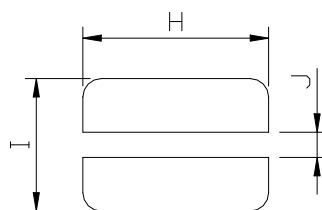
UNIT : mm



A=9.8 Max. B=2.9 Typ. D=5.8 Max.

### RECOMMENDED PATTERNS

UNIT : mm



H=10.0 Max. I=10.0 Max. J=2.8 Max.

### FEATURES

- AEC-Q200 Qualified Inductor , 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
- Diameter of only 9.8mm maximum and low profile of 5.8mm max.

### APPLICATION

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

## SPECIFICATION TABLE

PART NUMBER	INDUCTANCE ( $\mu$ H)	Q (Ref.)	DCR ( $\Omega$ ) (Max.)	IDC (A) (Max.)	TEST FREQ. (MHz)
SDR0905K-1R5M-LF	1.5 $\pm$ 20%	35	0.018	10.00	7.96
SDR0905K-2R2M-LF	2.5 $\pm$ 20%	35	0.021	10.00	7.96
SDR0905K-3R3M-LF	3.3 $\pm$ 20%	34	0.024	10.00	7.96
SDR0905K-3R9M-LF	3.9 $\pm$ 20%	34	0.027	8.40	7.96
SDR0905K-4R7M-LF	4.7 $\pm$ 20%	33	0.036	7.30	7.96
SDR0905K-5R6M-LF	5.6 $\pm$ 20%	33	0.040	6.40	7.96
SDR0905K-6R8M-LF	6.8 $\pm$ 20%	33	0.044	5.90	7.96
SDR0905K-8R2M-LF	8.2 $\pm$ 20%	31	0.048	5.40	7.96
SDR0905K-100M-LF	10 $\pm$ 20%	30	0.060	5.10	2.52
SDR0905K-120M-LF	12 $\pm$ 20%	30	0.070	4.50	2.52
SDR0905K-150M-LF	15 $\pm$ 20%	30	0.080	4.00	2.52
SDR0905K-180M-LF	18 $\pm$ 20%	30	0.090	3.80	2.52
SDR0905K-220M-LF	22 $\pm$ 20%	25	0.100	3.50	2.52
SDR0905K-270K-LF	27 $\pm$ 10%	25	0.110	3.40	2.52
SDR0905K-330K-LF	33 $\pm$ 10%	25	0.120	2.90	2.52
SDR0905K-390K-LF	39 $\pm$ 10%	20	0.140	2.60	2.52
SDR0905K-470K-LF	47 $\pm$ 10%	20	0.170	2.30	2.52
SDR0905K-560K-LF	56 $\pm$ 10%	20	0.190	2.10	2.52
SDR0905K-680K-LF	68 $\pm$ 10%	15	0.220	2.00	2.52
SDR0905K-820K-LF	82 $\pm$ 10%	15	0.250	1.90	2.52
SDR0905K-101K-LF	100 $\pm$ 10%	15	0.35	0.97	0.796
SDR0905K-121K-LF	120 $\pm$ 10%	15	0.40	0.89	0.796
SDR0905K-151K-LF	150 $\pm$ 10%	15	0.47	0.78	0.796
SDR0905K-181K-LF	180 $\pm$ 10%	12	0.63	0.72	0.796
SDR0905K-221K-LF	220 $\pm$ 10%	12	0.73	0.66	0.796
SDR0905K-271K-LF	270 $\pm$ 10%	12	0.97	0.57	0.796
SDR0905K-331K-LF	330 $\pm$ 10%	12	1.15	0.52	0.796
SDR0905K-391K-LF	390 $\pm$ 10%	12	1.30	0.48	0.796
SDR0905K-471K-LF	470 $\pm$ 10%	12	1.48	0.42	0.796
SDR0905K-561K-LF	560 $\pm$ 10%	12	1.90	0.33	0.796
SDR0905K-681K-LF	680 $\pm$ 10%	12	2.25	0.28	0.796
SDR0905K-821K-LF	820 $\pm$ 10%	10	2.55	0.24	0.796
SDR0905K-102K-LF	1000 $\pm$ 10%	30	3.10	0.23	0.252

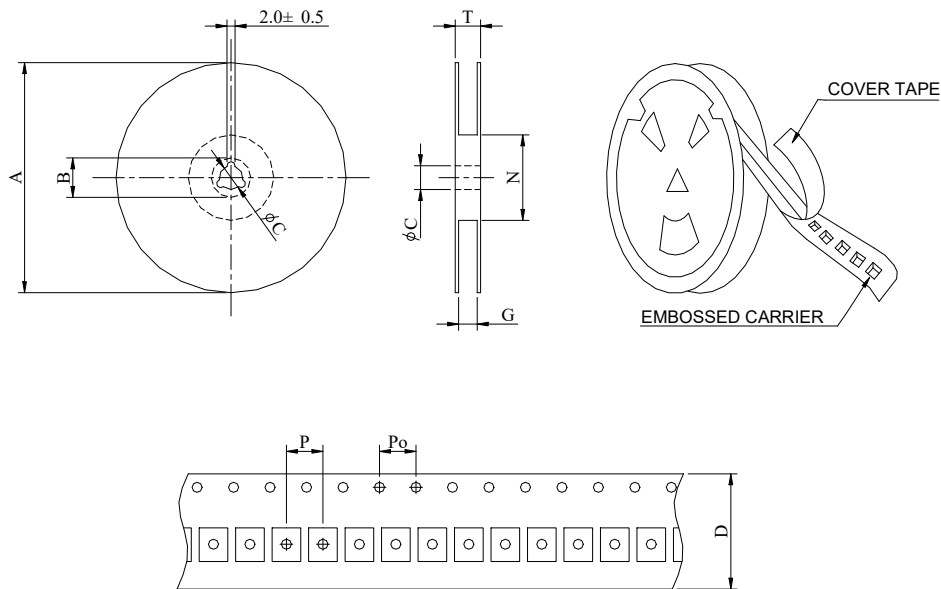
- DC current at which the inductance drops 10% (typ) from its value without current.
- Operating temperature range -40 $^{\circ}$ C to +125 $^{\circ}$ C , Electrical specifications at 25 $^{\circ}$ C

## SPECIFICATION TABLE

PART NUMBER	INDUCTANCE ( $\mu$ H)	Q (Ref.)	DCR ( $\Omega$ ) (Max.)	IDC (A) (Max.)	TEST FREQ. (MHz)
SDR0905K-122K-LF	1200 $\pm$ 10%	31	4.20	0.21	0.252
SDR0905K-152K-LF	1500 $\pm$ 10%	31	5.00	0.19	0.252
SDR0905K-182K-LF	1800 $\pm$ 10%	31	6.80	0.17	0.252
SDR0905K-222K-LF	2200 $\pm$ 10%	31	7.60	0.16	0.252
SDR0905K-272K-LF	2700 $\pm$ 10%	32	11.60	0.14	0.252
SDR0905K-332K-LF	3300 $\pm$ 10%	32	13.50	0.12	0.252
SDR0905K-392K-LF	3900 $\pm$ 10%	32	14.80	0.11	0.252
SDR0905K-472K-LF	4700 $\pm$ 10%	32	18.00	0.10	0.252

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

## PACKAGING SPECIFICATION



SERIES	Q'TY (PCS)	DIMENSIONS (m/m)								
		A	B $\pm$ 0.8	C $\pm$ 0.5	D	G $^{+0}$	N $^0$	P	Po	T
SDR0905K	500	330	21	13	24	26	50	12	4	30.4