



SDR0503K SERIES – SMD POWER INDUCTORS



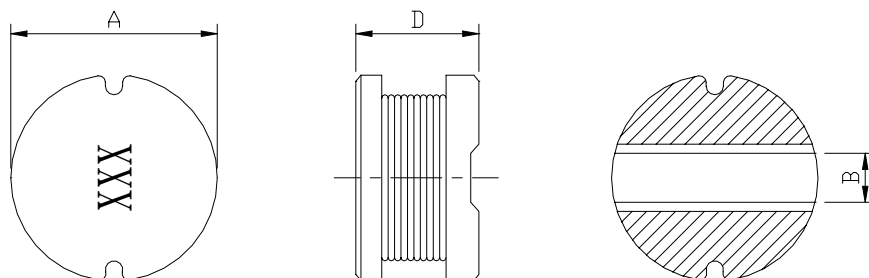
RoHS Compliant

PART NUMBERING SYSTEM

| | | | | | |
|------------|------------------|---|----------------|---|-----------|
| SDR | 0 5 0 3 K | — | 6 8 0 K | — | LF |
| TYPE | DIMENSIONS | | INDUCTANCE | | LEAD FREE |

SHAPES AND DIMENSIONS

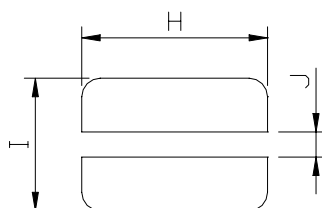
UNIT : mm



A=5.8 Max. B=1.8 Typ. D=3.9 Max.

RECOMMENDED PATTERNS

UNIT : mm



H=5.8 ref. I=6.0 ref. J=1.8 ref.

FEATURES

- ⊙ Available for lead free and RoHS compliant
- ⊙ Excellent solderability and high heat resistance
- ⊙ Excellent terminal strength constructions
- ⊙ Small diameter of only 5.8mm maximum and low profile of 4.8mm max.

APPLICATION

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



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SPECIFICATION TABLE

| PART NUMBER | INDUCTANCE (μ H) | Q (Ref.) | DCR (Ω) (Max.) | IDC (A) (Max.) | TEST FREQ. (MHz) |
|------------------|--------------------------|-------------|----------------------------|-------------------|---------------------|
| SDR0503K-1R5M-LF | 1.2 \pm 20% | 24 | 0.04 | 3.00 | 7.96 |
| SDR0503K-2R5M-LF | 1.5 \pm 20% | 21 | 0.05 | 2.35 | 7.96 |
| SDR0503K-3R3M-LF | 3.3 \pm 20% | 21 | 0.05 | 2.20 | 7.96 |
| SDR0503K-3R9M-LF | 3.9 \pm 20% | 22 | 0.05 | 2.10 | 7.96 |
| SDR0503K-4R7M-LF | 4.7 \pm 20% | 20 | 0.07 | 1.80 | 7.96 |
| SDR0503K-5R6M-LF | 5.6 \pm 20% | 19 | 0.07 | 1.60 | 7.96 |
| SDR0503K-6R8M-LF | 6.8 \pm 20% | 19 | 0.11 | 1.38 | 7.96 |
| SDR0503K-7R5M-LF | 7.5 \pm 20% | 19 | 0.12 | 1.29 | 7.96 |
| SDR0503K-100M-LF | 10 \pm 20% | 24 | 0.15 | 1.14 | 2.52 |
| SDR0503K-120M-LF | 12 \pm 20% | 23 | 0.16 | 1.02 | 2.52 |
| SDR0503K-150M-LF | 15 \pm 20% | 22 | 0.18 | 0.93 | 2.52 |
| SDR0503K-180M-LF | 18 \pm 20% | 23 | 0.25 | 0.82 | 2.52 |
| SDR0503K-220M-LF | 22 \pm 20% | 20 | 0.28 | 0.75 | 2.52 |
| SDR0503K-270M-LF | 27 \pm 20% | 19 | 0.30 | 0.67 | 2.52 |
| SDR0503K-330K-LF | 33 \pm 10% | 23 | 0.45 | 0.61 | 2.52 |
| SDR0503K-390K-LF | 39 \pm 10% | 22 | 0.46 | 0.56 | 2.52 |
| SDR0503K-470K-LF | 47 \pm 10% | 20 | 0.55 | 0.52 | 2.52 |
| SDR0503K-560K-LF | 56 \pm 10% | 17 | 0.62 | 0.48 | 2.52 |
| SDR0503K-680K-LF | 68 \pm 10% | 17 | 0.72 | 0.44 | 2.52 |
| SDR0503K-820K-LF | 82 \pm 10% | 15 | 0.84 | 0.40 | 2.52 |
| SDR0503K-101K-LF | 100 \pm 10% | 28 | 0.95 | 0.38 | 0.796 |
| SDR0503K-121K-LF | 120 \pm 10% | 27 | 1.10 | 0.36 | 0.796 |
| SDR0503K-151K-LF | 150 \pm 10% | 28 | 1.43 | 0.32 | 0.796 |
| SDR0503K-181K-LF | 180 \pm 10% | 26 | 1.60 | 0.30 | 0.796 |
| SDR0503K-221K-LF | 220 \pm 10% | 26 | 2.00 | 0.26 | 0.796 |
| SDR0503K-271K-LF | 270 \pm 10% | 26 | 2.40 | 0.24 | 0.796 |
| SDR0503K-331K-LF | 330 \pm 10% | 28 | 3.20 | 0.20 | 0.796 |
| SDR0503K-391K-LF | 390 \pm 10% | 28 | 3.40 | 0.18 | 0.796 |
| SDR0503K-471K-LF | 470 \pm 10% | 29 | 4.55 | 0.15 | 0.796 |

- 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.
- Packing : 13" reel, machine-ready ,embossed plastic tape (1,500 parts per full reel).

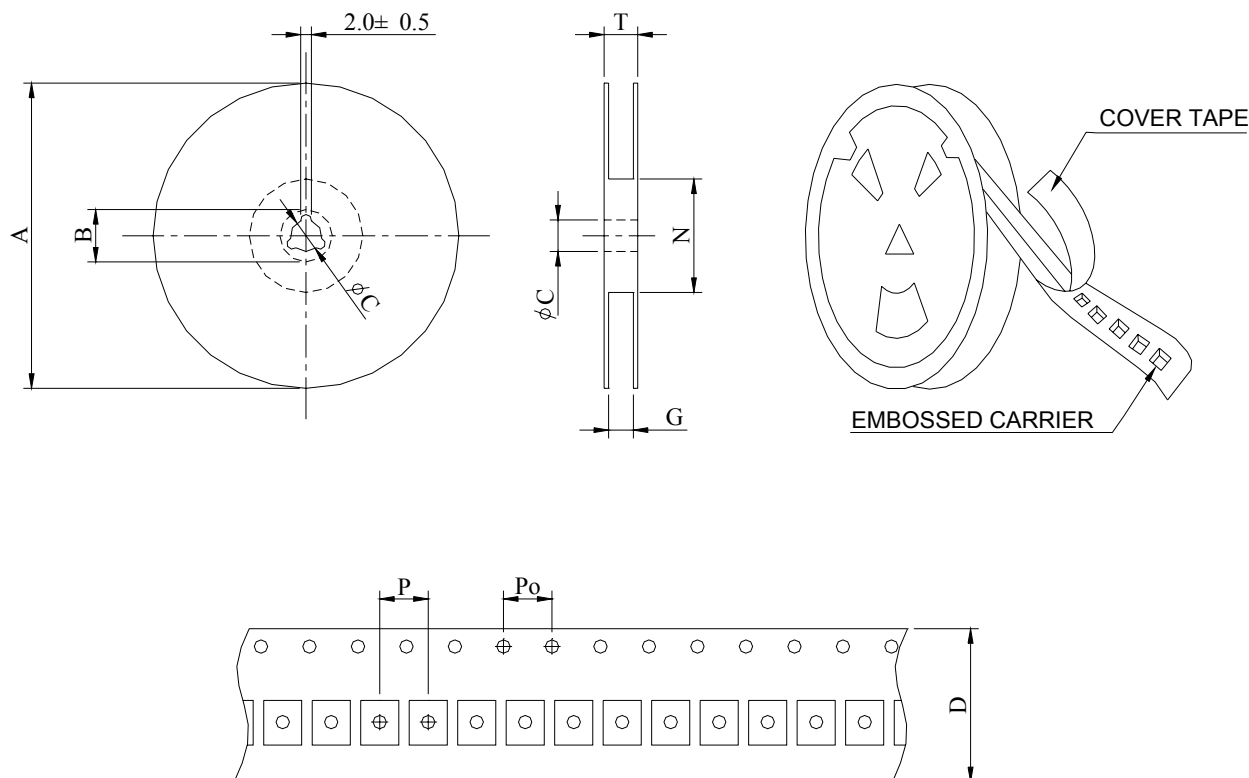


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PACKAGING SPECIFICATION

RoHS Compliant



| SERIES | Q' TY (PCS) | DIMENSIONS (m/m) | | | | | | | | |
|----------|----------------|------------------|-------|-------|----|-----------------|-----------------|---|----|------|
| | | A | B±0.8 | C±0.5 | D | G ⁺⁰ | N ⁻⁰ | P | Po | T |
| SDR0503K | 1500 | 330 | 21 | 13 | 12 | 14 | 50 | 8 | 4 | 18.4 |