



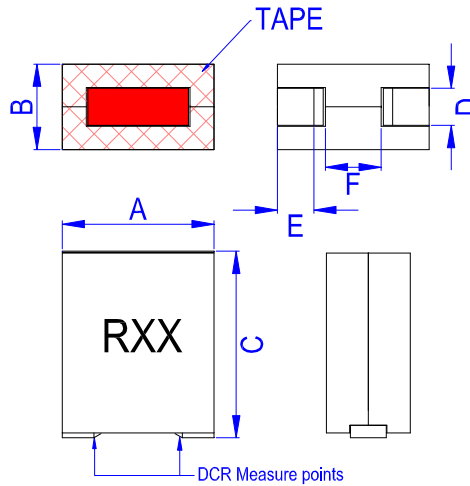
INDEX

| | |
|--|---|
| SHAPES AND DIMENSIONS..... | 1 |
| PART NUMBER CODE | 2 |
| ELECTRICAL CHARACTERISTICS | 3 |
| REEL DIMENSIONS AND PACKAGING QUANTITY | 4 |



SMT Power Inductor SIE2100612-S1 Series

■ SHAPES AND DIMENSIONS

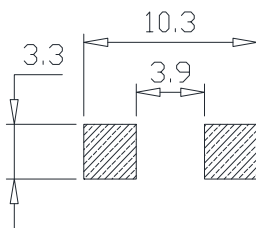


Unit: mm

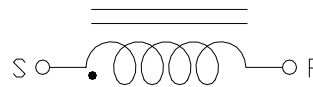
| P/N | A max | B max | C max | D | E | F |
|---------------|-------|---------|-------|---------|---------|--------|
| SIE2100612-S1 | 10.0 | 6.2/6.0 | 12.1 | 2.4±0.3 | 3.3±0.4 | 3.3ref |

Marking : XXX = Inductance

Recommend PAD Layout



Equivalent circuit





■ PART NUMBER CODE

SIE2 100612 - R10 L A - S1
1 2 3 4 5 6

1. Series Name
2. Size Code
3. Inductance(R=Decimal Point) Unit : μH ; R10 =0.10uH
4. Inductance tolerance: "L" $\pm 15\%$; "M" $\pm 20\%$.
5. Soldering : A=Lead Free
6. Special code



■ ELECTRICAL CHARACTERISTICS

1. Part Number and Characteristics Table

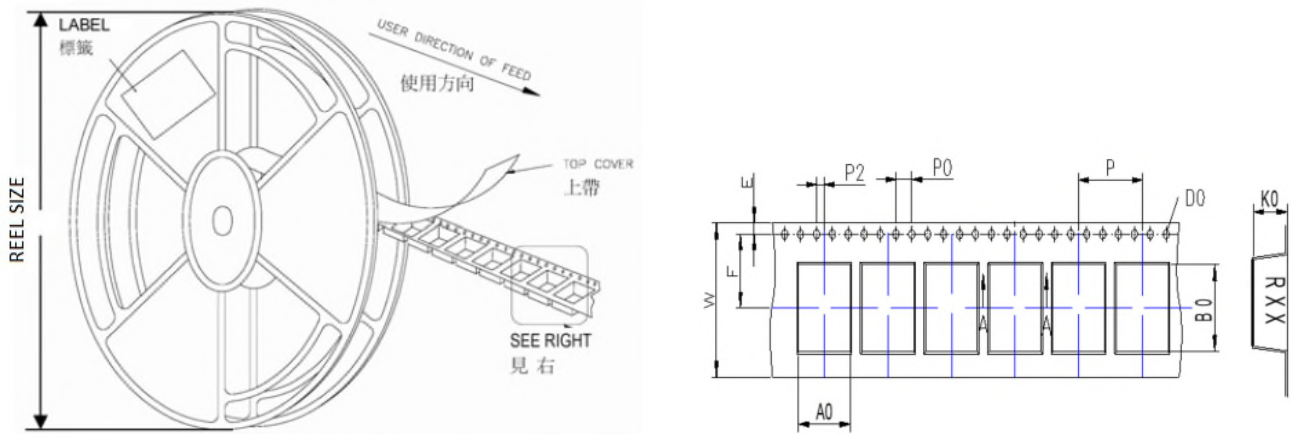
| Part number | Initial Inductance (nH) | Tolerance (±%) | DCR (mΩ) | 1-Saturation Current @25°C (Amps)(typ) | 2-Saturation Current @100°C (Amps)(typ) | Temperature Rise Current (Amps) | B mm |
|---------------------|-------------------------|----------------|-----------|--|---|---------------------------------|---------|
| SIE2100612-R07LA-S1 | 70 | 15 | 0.125±10% | 170(typ) | 155(typ) | 84(typ) | 6.2 Max |
| SIE2100612-R08LA-S1 | 80 | 15 | 0.125±10% | 150(typ) | 130(typ) | 84(typ) | 6.2 Max |
| SIE2100612-R09LA-S1 | 90 | 15 | 0.125±10% | 131(typ) | 110(typ) | 84(typ) | 6.0 Max |
| SIE2100612-R10LA-S1 | 100 | 15 | 0.125±10% | 125(typ) | 105(typ) | 84(typ) | 6.0 Max |
| SIE2100612-R12LA-S1 | 120 | 15 | 0.125±10% | 105(typ) | 88(typ) | 84(typ) | 6.0 Max |
| SIE2100612-R15LA-S1 | 150 | 15 | 0.125±10% | 88(typ) | 83(typ) | 84(typ) | 6.0 Max |
| SIE2100612-R22LA-S1 | 220 | 15 | 0.125±10% | 60(typ) | 50(typ) | 84(typ) | 6.0 Max |
| SIE2100612-R30LA-S1 | 300 | 15 | 0.125±10% | 41(typ) | 35(typ) | 84(typ) | 6.0 Max |
| SIE2100612-R33LA-S1 | 330 | 15 | 0.125±10% | 40(typ) | 32(typ) | 84(typ) | 6.0 Max |
| SIE2100612-R47MA-S1 | 470 | 20 | 0.125±10% | 27(typ) | 22(typ) | 84(typ) | 6.0 Max |
| SIE2100612-R58MA-S1 | 580 | 20 | 0.125±10% | 18(typ) | 15(typ) | 84(typ) | 6.0 Max |

Note:

- Initial Inductance: Testing at 100 KHz / 1.0 Vrms.
- Saturation Current: DC current that will cause initial Inductance to drop approximately 20%.
- Temperature Rise Current: DC current that will cause an approximate ΔT of 40°C.
- All test data is referenced to 25°C ambient.
- Operating temperature : -40~+125°C (Including self - temperature rise).



■ REEL DIMENSIONS AND PACKAGING QUANTITY



Unit: mm

| TYPE | W | P | REEL SIZE | PCS / REEL |
|---------------|----|----|--------------|------------|
| SIE2100612-S1 | 24 | 16 | 330 mm (13") | 300 |