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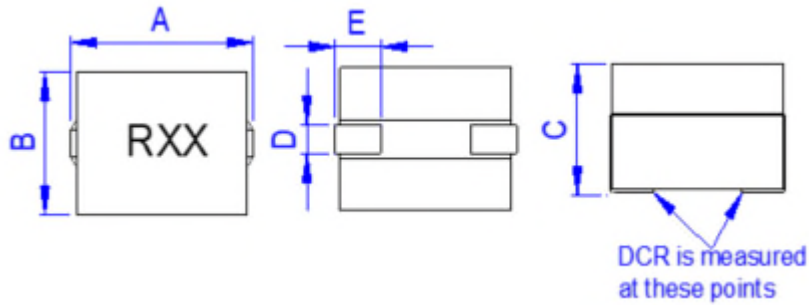
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SMT Power Inductor SIH1070-R47 Series

■ SHAPES AND DIMENSIONS

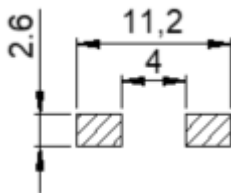


Unit: mm

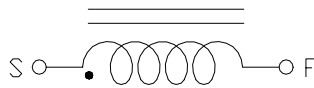
| P/N | A | B | C | D | E |
|--------------------|----------|---------|---------|---------|---------|
| SIH1070-R47 Series | 10.1±0.5 | 7.0±0.5 | 7.0±0.5 | 1.6±0.2 | 2.6±0.3 |

Marking : XXX = Inductance

Recommend PAD Layout



Equivalent circuit





■ PART NUMBER CODE

SIH 1070 - R10 M A - R47
1 2 3 4 5 6

1. Series Name
2. Size Code
3. Inductance(R=Decimal Point) Unit : nH ; R10 = 0.1uH = 100nH
4. Inductance tolerance: "M"±20%.
5. Soldering : A=Lead Free
6. Special code



■ ELECTRICAL CHARACTERISTICS

1. Part Number and Characteristics Table

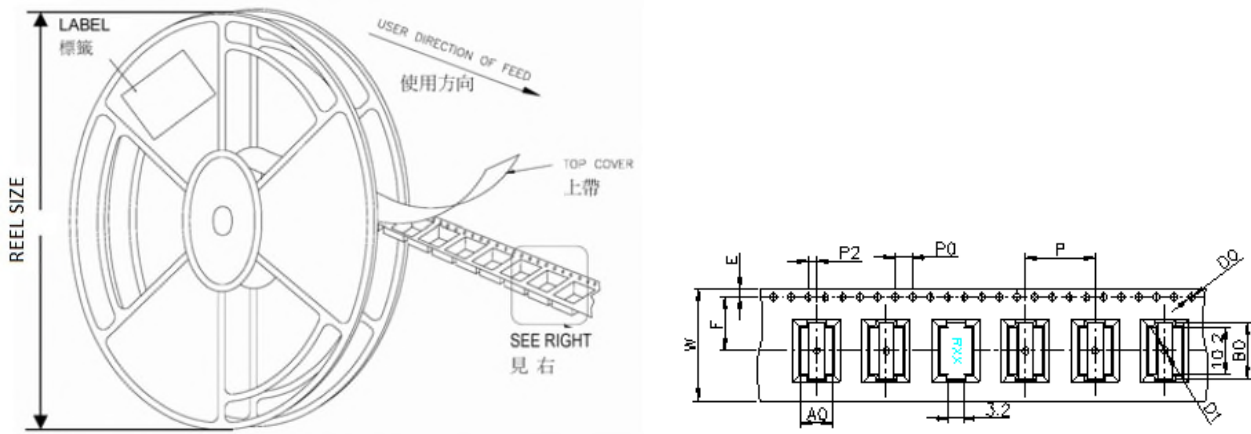
| Part number | Initial Inductance (nH) | Tolerance (±%) | DCR (mΩ) | 1-Saturation Current @25°C (Amps)(typ) | Temperature Rise Current (Amps)(typ) |
|-------------------|-------------------------|----------------|----------|--|--------------------------------------|
| SIH1070-R10MA-R47 | 100 | 20 | 0.47±10% | 60 Min | 27 |
| SIH1070-R12MA-R47 | 120 | 20 | 0.47±10% | 60 Min | 27 |
| SIH1070-R15MA-R47 | 150 | 20 | 0.47±10% | 58 | 27 |
| SIH1070-R18MA-R47 | 180 | 20 | 0.47±10% | 50 | 27 |
| SIH1070-R20MA-R47 | 200 | 20 | 0.47±10% | 48 | 27 |
| SIH1070-R22MA-R47 | 220 | 20 | 0.47±10% | 44 | 27 |
| SIH1070-R23MA-R47 | 220 | 20 | 0.47±10% | 42 | 27 |
| SIH1070-R25MA-R47 | 250 | 20 | 0.47±10% | 40 | 27 |
| SIH1070-R30MA-R47 | 300 | 20 | 0.47±10% | 33 | 27 |
| SIH1070-R33MA-R47 | 330 | 20 | 0.47±10% | 30 | 27 |
| SIH1070-R40MA-R47 | 400 | 20 | 0.47±10% | 22 | 27 |

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 |
|-------------|----|----|--------------|------------|
| SIH1070-R47 | 24 | 16 | 330 mm (13") | 500 |