



SPO2506 SERIES ~ SMD Power Inductors



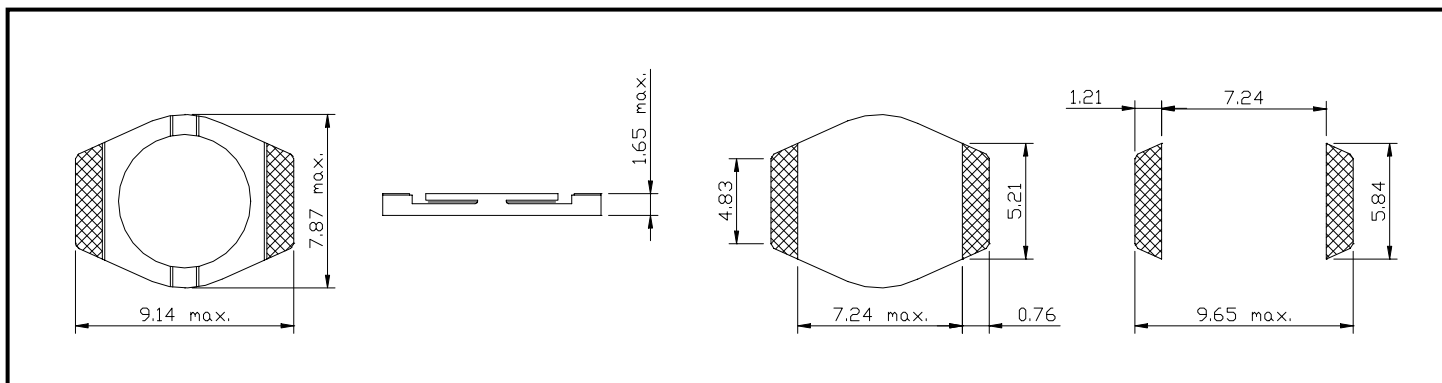
RoHS Compliant

PART NUMBERING SYSTEM

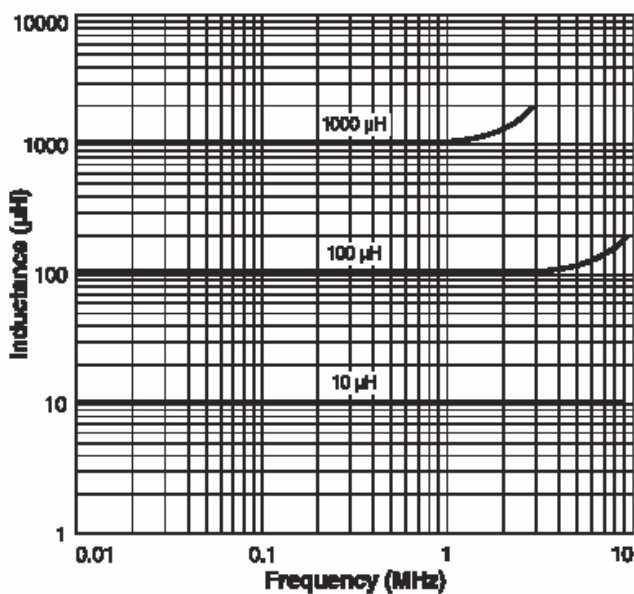
| | | | | | |
|------------|-------------|----------|-------------|----------|-----------|
| SPO | 2506 | — | 680M | — | LF |
| TYPE | DIMENSIONS | | INDUCTANCE | | LEAD FREE |

SHAPES AND DIMENSIONS

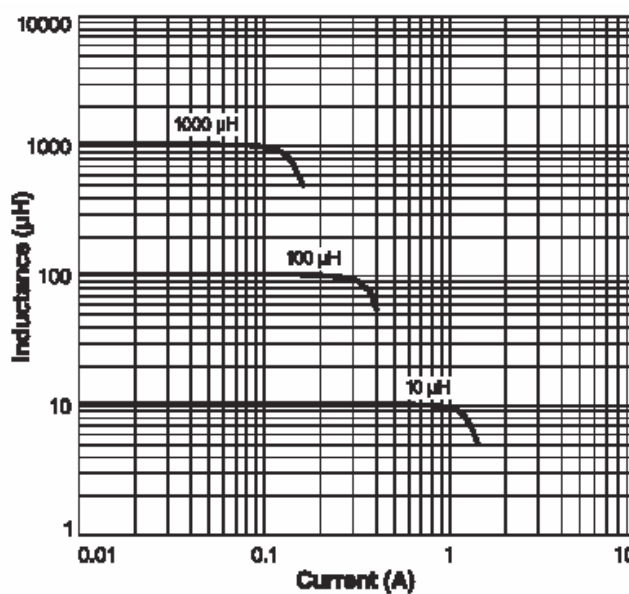
UNIT : mm



Typical L vs Frequency



Typical L vs Current





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SPECIFICATION TABLE

| PART NUMBER | INDUCTANCE (μ H) | DCR (Ω) (Max.) | I _{sat} (A) (Max.) | I _{rms} (A) (Max.) | SRF(MHz) (Ref.) |
|-----------------|--------------------------|----------------------------|----------------------------------|----------------------------------|--------------------|
| SPO2506-4R7M-LF | 4.7±20% | 0.145 | 1.60 | 1.90 | 90 |
| SPO2506-6R8M-LF | 6.8±20% | 0.165 | 1.30 | 1.70 | 75 |
| SPO2506-8R2M-LF | 8.2±20% | 0.200 | 1.00 | 1.50 | 65 |
| SPO2506-100M-LF | 10±20% | 0.240 | 1.00 | 1.50 | 60 |
| SPO2506-150M-LF | 15±20% | 0.300 | 0.90 | 1.30 | 45 |
| SPO2506-220M-LF | 22±20% | 0.420 | 0.70 | 1.00 | 35 |
| SPO2506-330M-LF | 33±20% | 0.550 | 0.60 | 0.90 | 30 |
| SPO2506-470M-LF | 47±20% | 0.765 | 0.50 | 0.70 | 22 |
| SPO2506-680M-LF | 68±20% | 1.10 | 0.40 | 0.60 | 20 |
| SPO2506-101M-LF | 100±20% | 1.60 | 0.30 | 0.50 | 15 |
| SPO2506-151M-LF | 150±20% | 2.50 | 0.25 | 0.40 | 12 |
| SPO2506-221M-LF | 220±20% | 3.65 | 0.22 | 0.32 | 10 |
| SPO2506-331M-LF | 330±20% | 4.65 | 0.18 | 0.28 | 8.0 |
| SPO2506-471M-LF | 470±20% | 6.75 | 0.14 | 0.24 | 6.5 |
| SPO2506-681M-LF | 680±20% | 9.15 | 0.12 | 0.20 | 5.5 |
| SPO2506-102M-LF | 1000±20% | 14.20 | 0.10 | 0.16 | 4.5 |

- Inductance tested at 100 kHz, 0.1 V_{rms}
- I_{sat} : DC current at which the inductance drops 10% (typ) from its value without current.
- I_{rms} : : Average current for 40°C temperature rise from 25°C ambient.
- Operating temperature range -40°C to +85°C.
- Electrical specifications at 25°C.

FEATURES

- Handles **up to 1.9 Amps**
- Inductance value from **4.7uH to 1000uH**
- On-board version is 1,65 mm high
- Ceramic cover provides **best possible surface for pick and place** operations.
- **RoHS-compliant.** 260°C compatible.



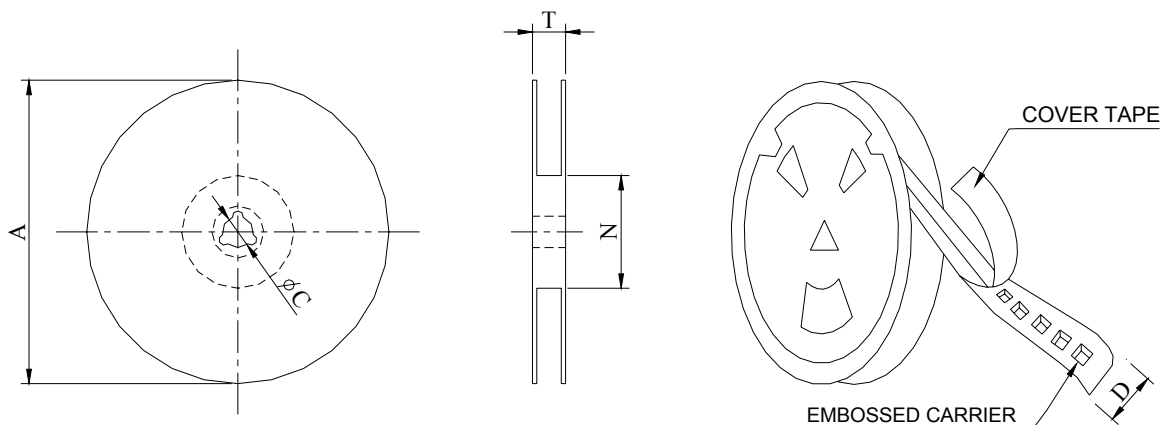
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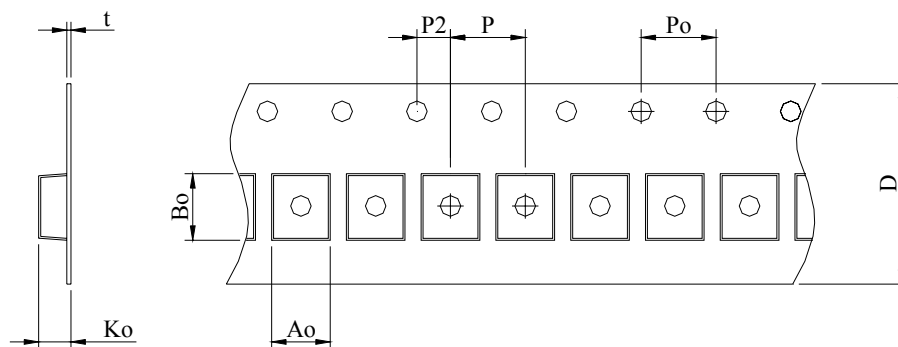
PACKAGING SPECIFICATION

Reel Dimensions



*CARRIER TAPE WIDTH : D

Tape Dimensions



| Piece /Reel | | Reel Dimensions | | | | Tape Dimensions | | | | | | | |
|-------------|-----|-----------------|-----|----|------|-----------------|-----|-----|----|----|----|----|-----|
| | | A | N | C | T | Ao | Bo | Ko | P | Po | P2 | D | t |
| 178 | 330 | 330 | 100 | 13 | 16.3 | 8.0 | 9.3 | 1.8 | 12 | 4 | 2 | 16 | 0.3 |