

SMD Power Inductors - SDO3316 SERIES

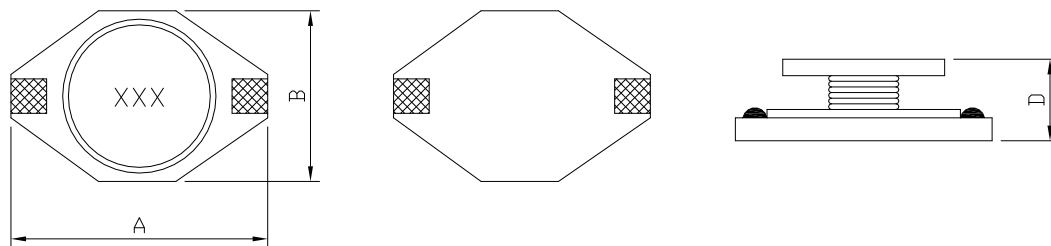


PART NUMBERING SYSTEM

| | | | | | |
|------------|-------------|---|-------------|---|-----------|
| SDO | 3316 | — | 101M | — | LF |
| TYPE | DIMENSIONS | | INDUCTANCE | | LEAD FREE |

SHAPES AND DIMENSIONS

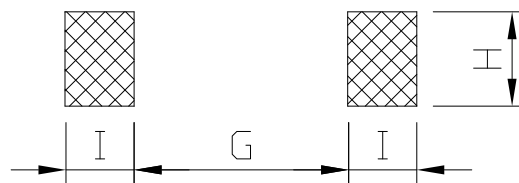
UNIT : mm



A : 12.95 Max. B : 9.4 Max. D : 5.21 Max.

RECOMMENDED PATTERNS

UNIT : mm



G : 7.37 Max. H : 2.79 Max. I : 2.92 Max.

FEATURES

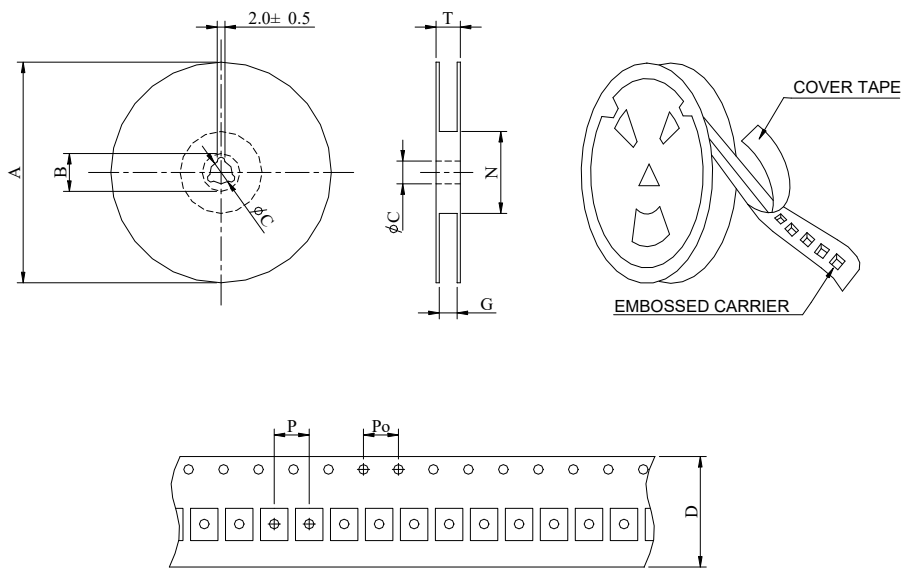
- Designed for **lowest cost** and **high performance**
- Saturation current rating **up to 9.0 Amps**
- Inductance ratings from 1.0 to 1000 μ H
- High energy storage and **very low resistance**
- **Higher L values** are suitable for **EL driver circuits**
- **Robust temperature deflection** prevents damage during solder reflow
- **RoHS-compliant.** 260°C compatible.

SPECIFICATION TABLE

| PART NUMBER | INDUCTANCE (μ H) | DCR (Ω) (Max.) | Isat (A) (Max.) | Irms (A) (Max.) | SRF(MHz) (Ref.) |
|-----------------|--------------------------|----------------------------|----------------------|----------------------|--------------------|
| SDO3316-1R0M-LF | 1.0 \pm 20% | 0.009 | 9.00 | 6.80 | 100 |
| SDO3316-1R5M-LF | 1.5 \pm 20% | 0.010 | 8.00 | 6.40 | 90 |
| SDO3316-2R2M-LF | 2.2 \pm 20% | 0.012 | 7.00 | 6.10 | 80 |
| SDO3316-3R3M-LF | 3.3 \pm 20% | 0.015 | 6.40 | 5.40 | 65 |
| SDO3316-4R7M-LF | 4.7 \pm 20% | 0.018 | 5.40 | 4.80 | 45 |
| SDO3316-6R8M-LF | 6.8 \pm 20% | 0.027 | 4.60 | 4.40 | 38 |
| SDO3316-100M-LF | 10 \pm 20% | 0.038 | 3.80 | 3.90 | 30 |
| SDO3316-150M-LF | 15 \pm 20% | 0.046 | 3.00 | 3.10 | 27 |
| SDO3316-220M-LF | 22 \pm 20% | 0.085 | 2.60 | 2.70 | 19 |
| SDO3316-330M-LF | 33 \pm 20% | 0.100 | 2.00 | 2.10 | 15 |
| SDO3316-470M-LF | 47 \pm 20% | 0.140 | 1.60 | 1.80 | 12 |
| SDO3316-680M-LF | 68 \pm 20% | 0.200 | 1.40 | 1.50 | 10 |
| SDO3316-101M-LF | 100 \pm 20% | 0.280 | 1.20 | 1.30 | 9 |
| SDO3316-151M-LF | 150 \pm 20% | 0.400 | 1.00 | 1.00 | 6 |
| SDO3316-221M-LF | 220 \pm 20% | 0.610 | 0.80 | 0.80 | 5 |
| SDO3316-331M-LF | 330 \pm 20% | 1.020 | 0.60 | 0.60 | 4.5 |
| SDO3316-471M-LF | 470 \pm 20% | 1.270 | 0.50 | 0.50 | 3.5 |
| SDO3316-681M-LF | 680 \pm 20% | 2.020 | 0.40 | 0.40 | 2.5 |
| SDO3316-102M-LF | 1000 \pm 20% | 3.000 | 0.30 | 0.30 | 2.0 |
| SDO3316-152M-LF | 1500 \pm 20% | 4.490 | 0.29 | 0.27 | 1.7 |
| SDO3316-332M-LF | 3300 \pm 20% | 8.970 | 0.19 | 0.17 | 1.1 |

1. Inductance is measured with a LCR meter 4284A or equivalent.
2. Inductance drop=10% typ. at rated current.
3. Operating temperature range -40 $^{\circ}$ C to +125 $^{\circ}$ C
4. Electrical specifications at 25 $^{\circ}$ C

PACKAGING SPECIFICATION



| SERIES | STAYLE | Q'TY (PCS) | DIMENSIONS (m/m) | | | | | | | | |
|---------|--------|---------------|------------------|-------|-------|----|-----------------|----------------|----|----|------|
| | | | A | B±0.8 | C±0.5 | D | G ⁺⁰ | N ⁰ | P | Po | T |
| SDO3316 | 13-24 | 1,000 | 330 | 21 | 13 | 24 | 26 | 50 | 16 | 4 | 30.4 |