



SDH3316 SERIES ~ SMD Power Inductors

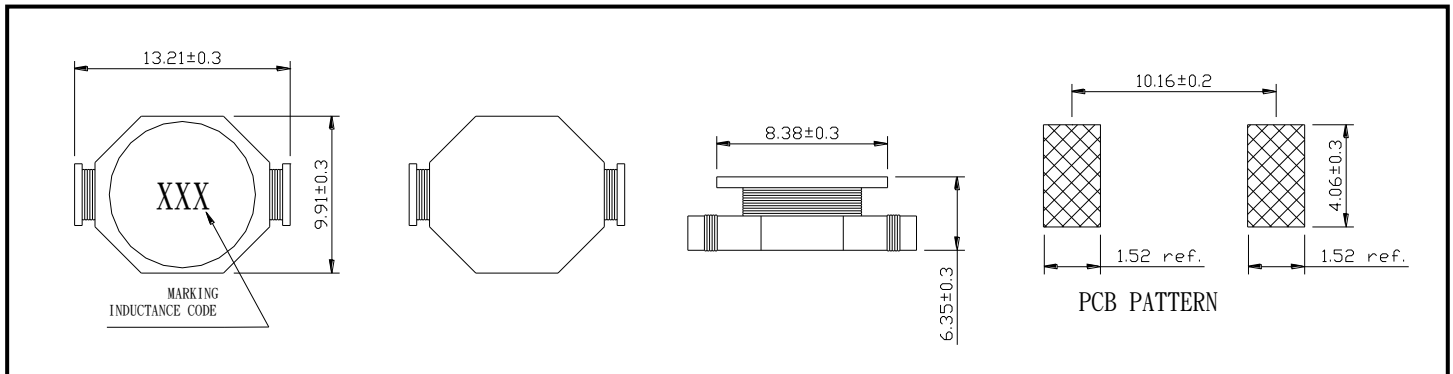


PART NUMBERING SYSTEM

| | | | | | |
|------------|-------------|---|-------------|---|-----------|
| SDH | 3316 | — | R68M | — | LF |
| TYPE | DIMENSIONS | | INDUCTANCE | | LEAD FREE |

SHAPES AND DIMENSIONS

UNIT : mm



FEATURES

- Very high current ratings - **up to 22 Arms; 28 Asat**
- Low profile and small footprint - **only 0.51" x 0.37" x 0.25" high**
- Designed for **high ambient temperatures** - up to **155°C**
- Very high current ratings - **up to 16 Arms; 20 A saturating current**
- **Exceptionally low DC resistance** thanks to the use of heavier gauge wire
- **RoHS-compliant.** 260°C compatible. Tin-silver over copper terminations



SDH3316 SERIES ~ SMD Power Inductors



SPECIFICATION TABLE

| PART NUMBER | INDUCTANCE (μ H) | DCR(Ω) (Max.) | Isat (A) (Max.) | Irms (A) (Max.) | SRF(MHz) (Ref.) |
|-----------------|--------------------------|---------------------------|----------------------|----------------------|--------------------|
| SDH3316-R12M-LF | 0.12 \pm 20% | 0.0015 | 28.0 | 22.0 | 300 |
| SDH3316-R33M-LF | 0.33 \pm 20% | 0.002 | 20.0 | 16.0 | 200 |
| SDH3316-R68M-LF | 0.68 \pm 20% | 0.005 | 13.0 | 12.0 | 200 |
| SDH3316-1R0M-LF | 1.0 \pm 20% | 0.006 | 11.0 | 10.0 | 100 |
| SDH3316-1R5M-LF | 1.5 \pm 20% | 0.008 | 9.00 | 9.00 | 90 |
| SDH3316-2R2M-LF | 2.2 \pm 20% | 0.011 | 7.80 | 7.40 | 90 |
| SDH3316-2R7M-LF | 2.7 \pm 20% | 0.012 | 7.00 | 6.60 | 65 |
| SDH3316-3R3M-LF | 3.3 \pm 20% | 0.014 | 6.40 | 5.90 | 60 |
| SDH3316-3R9M-LF | 3.9 \pm 20% | 0.015 | 5.90 | 5.30 | 50 |
| SDH3316-4R7M-LF | 4.7 \pm 20% | 0.018 | 5.40 | 4.80 | 50 |
| SDH3316-5R6M-LF | 5.6 \pm 20% | 0.021 | 4.70 | 4.65 | 45 |
| SDH3316-6R8M-LF | 6.8 \pm 20% | 0.024 | 4.40 | 4.40 | 43 |
| SDH3316-8R2M-LF | 8.2 \pm 20% | 0.032 | 4.00 | 4.15 | 34 |
| SDH3316-100M-LF | 10 \pm 20% | 0.034 | 3.90 | 3.90 | 31 |
| SDH3316-120M-LF | 12 \pm 20% | 0.036 | 3.30 | 3.50 | 27 |
| SDH3316-150M-LF | 15 \pm 20% | 0.045 | 3.10 | 3.10 | 25 |
| SDH3316-180M-LF | 18 \pm 20% | 0.050 | 2.80 | 2.90 | 22 |
| SDH3316-220M-LF | 22 \pm 20% | 0.070 | 2.50 | 2.70 | 18 |
| SDH3316-270M-LF | 27 \pm 20% | 0.085 | 2.30 | 2.30 | 18 |
| SDH3316-330M-LF | 33 \pm 20% | 0.100 | 2.00 | 2.10 | 17 |
| SDH3316-390M-LF | 39 \pm 20% | 0.120 | 1.80 | 1.95 | 15 |
| SDH3316-470M-LF | 47 \pm 20% | 0.150 | 1.65 | 1.80 | 14 |
| SDH3316-560M-LF | 56 \pm 20% | 0.165 | 1.45 | 1.55 | 12 |
| SDH3316-680M-LF | 68 \pm 20% | 0.220 | 1.40 | 1.50 | 11 |
| SDH3316-820M-LF | 82 \pm 20% | 0.250 | 1.30 | 1.40 | 10 |
| SDH3316-101M-LF | 100 \pm 20% | 0.280 | 1.20 | 1.30 | 9 |
| SDH3316-121M-LF | 120 \pm 20% | 0.400 | 1.00 | 1.00 | 8 |
| SDH3316-151M-LF | 150 \pm 20% | 0.460 | 0.90 | 0.90 | 6 |

- Inductance tested at 100 kHz, 0.1 Vrms
- Isat: DC current at which the inductance drops 10% (typ) from its value without current.
- Irms: Average current for 40°C temperature rise from 25°C ambient.
- Operating temperature range -40°C to +155°C, Electrical specifications at 25°C

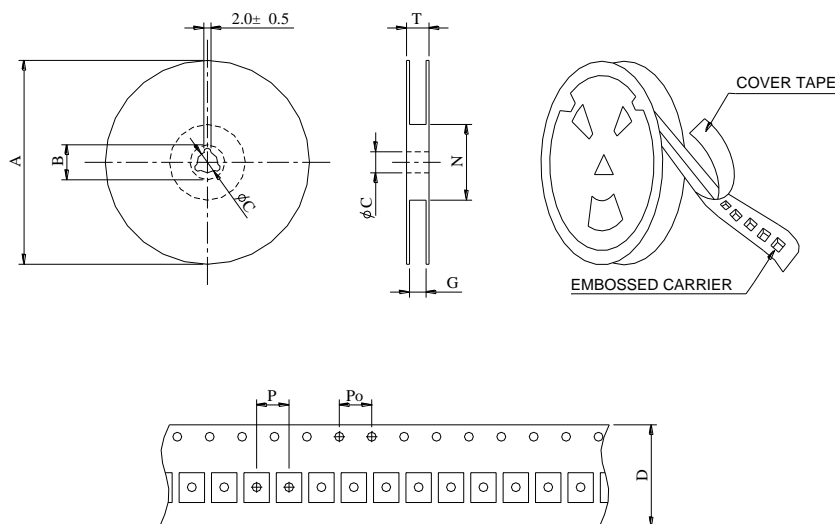
SDH3316 SERIES ~ SMD Power Inductors



| PART NUMBER | INDUCTANCE (μ H) | DCR(Ω) (Max.) | Isat (A) (Max.) | Irms (A) (Max.) | SRF(MHz) (Ref.) |
|-----------------|--------------------------|---------------------------|----------------------|----------------------|--------------------|
| SDH3316-181M-LF | 180 \pm 20% | 0.520 | 0.85 | 0.85 | 6 |
| SDH3316-221M-LF | 220 \pm 20% | 0.700 | 0.80 | 0.80 | 5 |
| SDH3316-271M-LF | 270 \pm 20% | 0.800 | 0.75 | 0.70 | 5 |
| SDH3316-331M-LF | 330 \pm 20% | 1.070 | 0.60 | 0.60 | 4.5 |
| SDH3316-391M-LF | 390 \pm 20% | 1.140 | 0.62 | 0.55 | 4.0 |
| SDH3316-471M-LF | 470 \pm 20% | 1.270 | 0.50 | 0.50 | 3.5 |

- Inductance tested at 100 kHz, 0.1 Vrms
- Isat: DC current at which the inductance drops 10% (typ) from its value without current.
- Irms: Average current for 40°C temperature rise from 25°C ambient.
- Operating temperature range -40°C to +155°C,
- Electrical specifications at 25°C

PACKAGING SPECIFICATION



| SERIES | STAYLE | Q'TY (PCS) | DIMENSIONS (m/m) | | | | | | | | |
|---------|--------|---------------|------------------|-------------|-------------|----|-----------------|-----------------|----|----|------|
| | | | A | B \pm 0.8 | C \pm 0.5 | D | G ⁺⁰ | N ⁻⁰ | P | Po | T |
| SDH3316 | 13-24 | 1,000 | 330 | 21 | 13 | 24 | 26 | 50 | 16 | 4 | 30.4 |