



Monolithic Chip Inductors



MECHANICAL SPECIFICATIONS

Solderability: 90 % coverage after 5 s dip in 235 °C solder following 60 s preheat at 120 °C to 150 °C and type R flux dip **Resistance to Solder Heat:** 10 s in 260 °C solder, after

preheat and flux per above
Termination: 100 % Sn

Terminal Strength: 0.6 kg for 30 s

Beam Strength: 1.0 kg

FEATURES

- · High reliability
- Surface mountable
- Magnetically self shielded
- Nickel barrier plating virtually eliminates silver migration
- Material categorization: for definitions of compliance please www.vishay.com/doc?99912



ROHS

HALOGEN FREE

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature: -55 °C to +125 °C

Thermal Shock: -40 °C to +85 °C

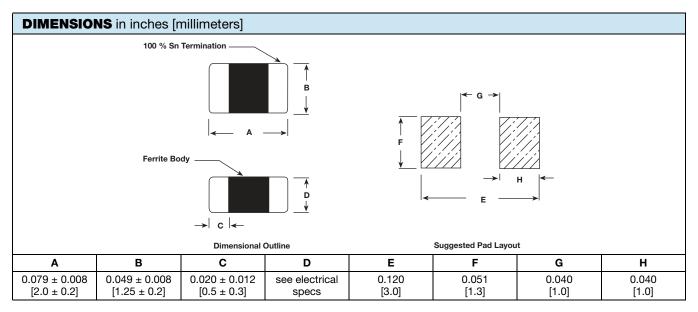
Humidity: 90 % RH at 40 °C, 1000 h at full rated current

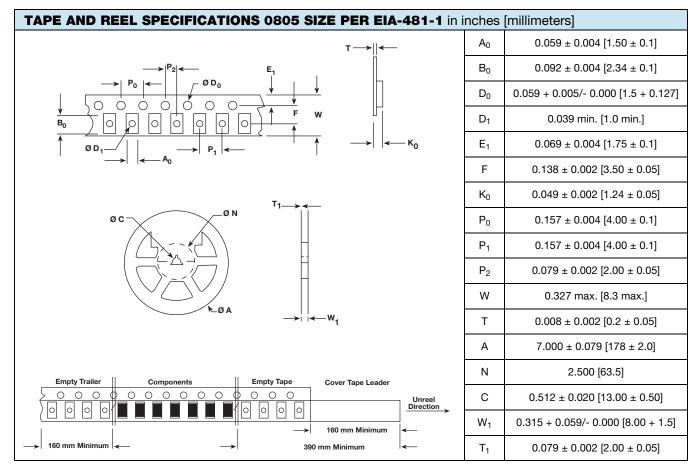
Load Life: 85 °C for 1000 h at full rated current

| NDUCTANCE | | THICKNESS "D" | TEST FREQ. (MHz) | Q | SRF MIN. | DCR MAX. | RATED DC CURRENT |
|------------|------|--|---------------------|----------|----------|-------------|---------------------|
| (μH) | TOL. | (INCHES [mm]) | L AND Q | MĨN. | (MHz) | (Ω) | (mA) |
| 0.047 | 20 % | $0.035 \pm 0.008 [0.90 \pm 0.2]$ | 50 | 15 | 320 | 0.20 | 300 |
| 0.056 | 20 % | $0.035 \pm 0.008 [0.90 \pm 0.2]$ | 50 | 15 | 300 | 0.20 | 300 |
| 0.068 | 20 % | $0.035 \pm 0.008 [0.90 \pm 0.2]$ | 50 | 15 | 280 | 0.20 | 300 |
| 0.082 | 20 % | $0.035 \pm 0.008 [0.90 \pm 0.2]$ | 50 | 15 | 255 | 0.20 | 300 |
| 0.10 | 10 % | $0.035 \pm 0.008 [0.90 \pm 0.2]$ | 25 | 20 | 279 | 0.30 | 250 |
| 0.12 | 10 % | $0.035 \pm 0.008 [0.90 \pm 0.2]$ | 25 | 20 | 253 | 0.30 | 250 |
| 0.15 | 10 % | $0.035 \pm 0.008 [0.90 \pm 0.2]$ | 25 | 20 | 230 | 0.40 | 250 |
| 0.18 | 10 % | $0.035 \pm 0.008 [0.90 \pm 0.2]$ | 25 | 20 | 213 | 0.40 | 250 |
| 0.22 | 10 % | $0.035 \pm 0.008 [0.90 \pm 0.2]$ $0.035 \pm 0.008 [0.90 \pm 0.2]$ | 25 | 20 | 196 | 0.50 | 250 |
| 0.27 | 10 % | $0.035 \pm 0.008 [0.90 \pm 0.2]$ $0.035 \pm 0.008 [0.90 \pm 0.2]$ | 25 | 20 | 173 | 0.50 | 250 |
| 0.33 | 10 % | $0.035 \pm 0.008 [0.90 \pm 0.2]$ $0.035 \pm 0.008 [0.90 \pm 0.2]$ | 25 | 20 | 167 | 0.55 | 250 |
| 0.39 | 10 % | $0.035 \pm 0.008 [0.90 \pm 0.2]$ $0.035 \pm 0.008 [0.90 \pm 0.2]$ | 25 25 | 25 | 156 | 0.65 | 200 |
| 0.39 | 10 % | $0.035 \pm 0.008 [0.90 \pm 0.2]$ $0.035 \pm 0.008 [0.90 \pm 0.2]$ | 25 | 25 | 144 | 0.65 | 200 |
| 0.56 | 10 % | $0.035 \pm 0.008 [0.90 \pm 0.2]$ $0.035 \pm 0.008 [0.90 \pm 0.2]$ | 25 25 | 25 | 133 | 0.75 | 150 |
| 0.68 | 10 % | $0.035 \pm 0.008 [0.90 \pm 0.2]$ $0.035 \pm 0.008 [0.90 \pm 0.2]$ | 25 25 | 25 | 121 | 0.75 | 150 |
| 0.82 | 10 % | | 25 25 | 25 | 115 | 1.00 | 150 |
| | 10 % | $0.035 \pm 0.008 [0.90 \pm 0.2]$ | 10 | | | 0.40 | 50 |
| 1.0 | 10 % | $0.035 \pm 0.008 [0.90 \pm 0.2]$ | 10 | 45 45 | 87 75 | 0.40 | 50 |
| 1.2 1.5 | | $0.035 \pm 0.008 [0.90 \pm 0.2]$ | | 45 45 | | | |
| | 10 % | $0.035 \pm 0.008 [0.90 \pm 0.2]$ | 10 | | 69 | 0.50 | 50 |
| 1.8 | 10 % | $0.035 \pm 0.008 [0.90 \pm 0.2]$ | 10 | 45 | 64 | 0.60 | 50 |
| 2.2 | 10 % | $0.035 \pm 0.008 [0.90 \pm 0.2]$ | 10 | 45 | 58 | 0.65 | 30 |
| 2.7 | 10 % | $0.049 \pm 0.008 [1.25 \pm 0.2]$ | 10 | 45 | 52 | 0.75 | 30 |
| 3.3 | 10 % | $0.049 \pm 0.008 [1.25 \pm 0.2]$ | 10 | 45 | 48 | 0.80 | 30 |
| 3.9 | 10 % | $0.049 \pm 0.008 [1.25 \pm 0.2]$ | 10 | 45 | 44 | 0.90 | 30 |
| 4.7 | 10 % | $0.049 \pm 0.008 [1.25 \pm 0.2]$ | 10 | 45 | 41 | 1.00 | 30 |
| 5.6 | 10 % | $0.049 \pm 0.008 [1.25 \pm 0.2]$ | 4 | 45 | 37 | 0.90 | 15 |
| 6.8 | 10 % | $0.049 \pm 0.008 [1.25 \pm 0.2]$ | 4 | 45 | 34 | 1.00 | 15 |
| 8.2 | 10 % | $0.049 \pm 0.008 [1.25 \pm 0.2]$ | 4 2 2 1 | 45 | 30 | 1.10 | 15 |
| 10 | 10 % | $0.049 \pm 0.008 [1.25 \pm 0.2]$ | 2 | 50 | 28 | 1.15 | 15 |
| 12 | 10 % | $0.049 \pm 0.008 [1.25 \pm 0.2]$ | 2 | 50 | 26 | 1.25 | 15 |
| 15 | 10 % | $0.049 \pm 0.008 [1.25 \pm 0.2]$ | | 30 | 22 | 0.80 | 5 |
| 18 | 10 % | $0.049 \pm 0.008 [1.25 \pm 0.2]$ | 1 | 30 | 21 | 0.90 | 5 5 5 |
| 22 | 10 % | $0.049 \pm 0.008 [1.25 \pm 0.2]$ | 1 | 30 | 19 | 1.10 | 5 |
| 27 | 10 % | $0.049 \pm 0.008 [1.25 \pm 0.2]$ | 1 | 30 | 17 | 1.15 | 5 |
| 33 | 10 % | $0.049 \pm 0.008 [1.25 \pm 0.2]$ | 0.4 | 30 | 13 | 1.25 | 5 |

| DESCRIPTION | | | | | | | | | |
|--------------------|------------------|----------------------|-----------------|--------------------------------|--|--|--|--|--|
| ILSB-0805 | 3.3 µH | ± 10 % | ER | e3 | | | | | |
| MODEL | INDUCTANCE VALUE | INDUCTANCE TOLERANCE | PACKAGE CODE | JEDEC® LEAD (Pb)-FREE STANDARD | | | | | |
| GLOBAL PART NUMBER | | | | | | | | | |
| I L | S B 0 | 8 0 5 | E R | 3 R 3 K | | | | | |
| PRODUC | CT FAMILY | SIZE | PACKAGE CODE | INDUCTANCE TOL. VALUE | | | | | |









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