

New Product

SURFACE MOUNT SHIELDED POWER INDUCTOR SERIES SDB8450

FEATURES

- RoHS compliant
- High current handling capacity in a shielded package
- Easy to use in any design
- Ideal for use in laptops, communication systems and MP3 players

ELECTRICAL SPECIFICATIONS

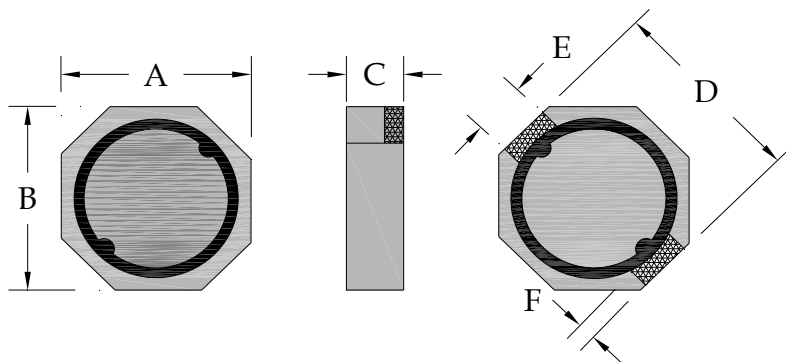
- Inductance range 1uH to 47mH
- Test condition (1uH - 8.2uH) 100kHz @ 0.25Vrms
- Test condition (10uH - 47mH) 1kHz @ 0.25Vrms
- Test equipment Quadtech 1750 LCR Meter

PHYSICAL SPECIFICATIONS

- Operating temp. -25°C to +105°C
- Core Ferrite
- Packaging T & R 350 or 1500 pieces per reel
- Tape & reel spec. Tape 12 mm embossed carrier
- Reel 178 or 330 mm dia

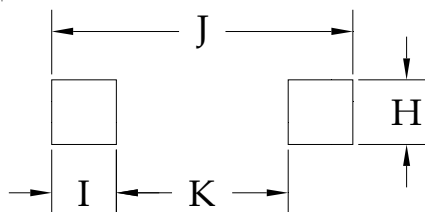
Dimensions in millimeters

- Length A 8.3 max
- Width B 8.3 max
- Height C 4.5 max
- D 8.9 ± 0.3
- Term width E 2.5 ref
- Term length F 0.8 ref



Suggested PCB land pattern

- H = 2.8
- I = 1.7
- J = 9.5
- K = 6.1



Notes:

1. Based on ΔL of 30% max or ΔT of 40°C max, whichever occurs first
2. All test data based on 25°C ambient. Part temperature (max ambient + temp rise) must not exceed 105°C under worst case operating conditions. Circuit design, other components, PCB trace size and thickness, airflow and other cooling provisions all effect the part temperature.

SPECIFICATIONS

| Part Number | L(uH) | Tol % ± | DCR (ohms) max | Rated Current (A) (Note 1) |
|--------------|-------|---------|----------------|----------------------------|
| SDB8450-1R0M | 1.0 | 20 | 0.010 | 8.71 |
| SDB8450-1R5M | 1.5 | 20 | 0.012 | 7.78 |
| SDB8450-2R2M | 2.2 | 20 | 0.015 | 6.15 |
| SDB8450-3R0M | 3.0 | 20 | 0.016 | 5.45 |
| SDB8450-3R3M | 3.3 | 20 | 0.017 | 5.10 |
| SDB8450-3R9M | 3.9 | 20 | 0.019 | 5.00 |
| SDB8450-4R7M | 4.7 | 20 | 0.022 | 4.60 |
| SDB8450-5R6M | 5.6 | 20 | 0.024 | 4.30 |
| SDB8450-6R8M | 6.8 | 20 | 0.025 | 4.20 |
| SDB8450-8R2M | 8.2 | 20 | 0.031 | 3.70 |
| SDB8450-100M | 10 | 20 | 0.036 | 3.60 |
| SDB8450-120M | 12 | 20 | 0.046 | 2.70 |
| SDB8450-150M | 15 | 20 | 0.053 | 2.60 |
| SDB8450-180M | 18 | 20 | 0.073 | 2.15 |
| SDB8450-220M | 22 | 20 | 0.075 | 2.10 |
| SDB8450-270M | 27 | 20 | 0.110 | 1.70 |
| SDB8450-330M | 33 | 20 | 0.125 | 1.60 |
| SDB8450-390M | 39 | 20 | 0.14 | 1.50 |
| SDB8450-470M | 47 | 20 | 0.15 | 1.40 |
| SDB8450-560M | 56 | 20 | 0.21 | 1.20 |
| SDB8450-680M | 68 | 20 | 0.23 | 1.15 |
| SDB8450-820M | 82 | 20 | 0.28 | 1.03 |
| SDB8450-101M | 100 | 20 | 0.36 | 0.94 |
| SDB8450-121M | 120 | 20 | 0.44 | 0.86 |
| SDB8450-151M | 150 | 20 | 0.49 | 0.78 |
| SDB8450-181M | 180 | 20 | 0.60 | 0.72 |
| SDB8450-221M | 220 | 20 | 0.76 | 0.62 |
| SDB8450-271M | 270 | 20 | 0.87 | 0.56 |
| SDB8450-331M | 330 | 20 | 1.05 | 0.52 |
| SDB8450-391M | 390 | 20 | 1.22 | 0.47 |
| SDB8450-471M | 470 | 20 | 1.53 | 0.44 |
| SDB8450-561M | 560 | 20 | 1.86 | 0.41 |
| SDB8450-681M | 680 | 20 | 2.10 | 0.37 |
| SDB8450-821M | 820 | 20 | 2.61 | 0.33 |
| SDB8450-102M | 1000 | 20 | 3.34 | 0.30 |
| SDB8450-122M | 1200 | 20 | 3.74 | 0.28 |
| SDB8450-152M | 1500 | 20 | 4.92 | 0.25 |
| SDB8450-222M | 2200 | 20 | 7.89 | 0.19 |
| SDB8450-272M | 2700 | 20 | 8.96 | 0.17 |
| SDB8450-332M | 3300 | 20 | 10.0 | 0.16 |
| SDB8450-392M | 3900 | 20 | 12.3 | 0.15 |
| SDB8450-472M | 4700 | 20 | 14.8 | 0.12 |
| SDB8450-562M | 5600 | 20 | 17.1 | 0.11 |
| SDB8450-682M | 6800 | 20 | 23.3 | 0.10 |
| SDB8450-822M | 8200 | 20 | 28.4 | 0.096 |
| SDB8450-103M | 10000 | 20 | 35.8 | 0.084 |
| SDB8450-123M | 12000 | 20 | 44.8 | 0.082 |
| SDB8450-153M | 15000 | 20 | 50.8 | 0.074 |
| SDB8450-183M | 18000 | 20 | 65.9 | 0.068 |
| SDB8450-223M | 22000 | 20 | 85.4 | 0.064 |
| SDB8450-273M | 27000 | 20 | 112.4 | 0.060 |
| SDB8450-333M | 33000 | 20 | 146.0 | 0.050 |
| SDB8450-393M | 39000 | 20 | 150.0 | 0.047 |
| SDB8450-473M | 47000 | 20 | 198.0 | 0.042 |