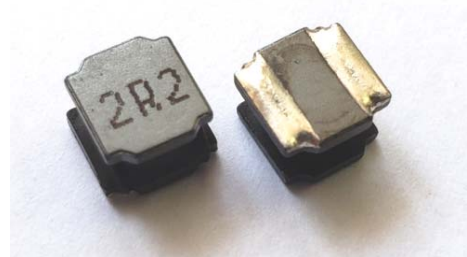


3. SDB 0840T Series (Shielded Type)

Applications

- Watches, Toys Camera, Electronic Thermometers.
- Portable communication equipment.
- DC/DC converters, etc.
- Power supply for VTRs.
- Other various electronic appliances.



Features

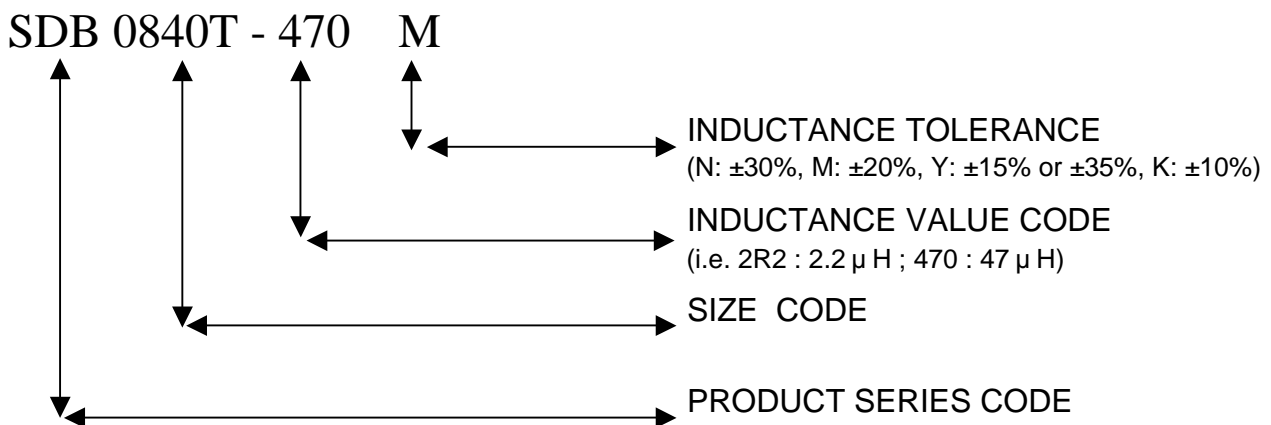
- Compact, low profile with low Rdc and large current.
- With magnetic shielded against radiation.
- Flat bottom surface allows reliable mounting onto the board.
- Available on tape and reel for auto surface mounting.

Inductance and Rated Current ranges

| Part Series | Inductances range | Rated Current range |
|-------------|-------------------|---------------------------------------|
| * SDB0840T | 0.90~470 μ H | 7.80~0.50A (Irms) ; 11.0~0.60A (Isat) |

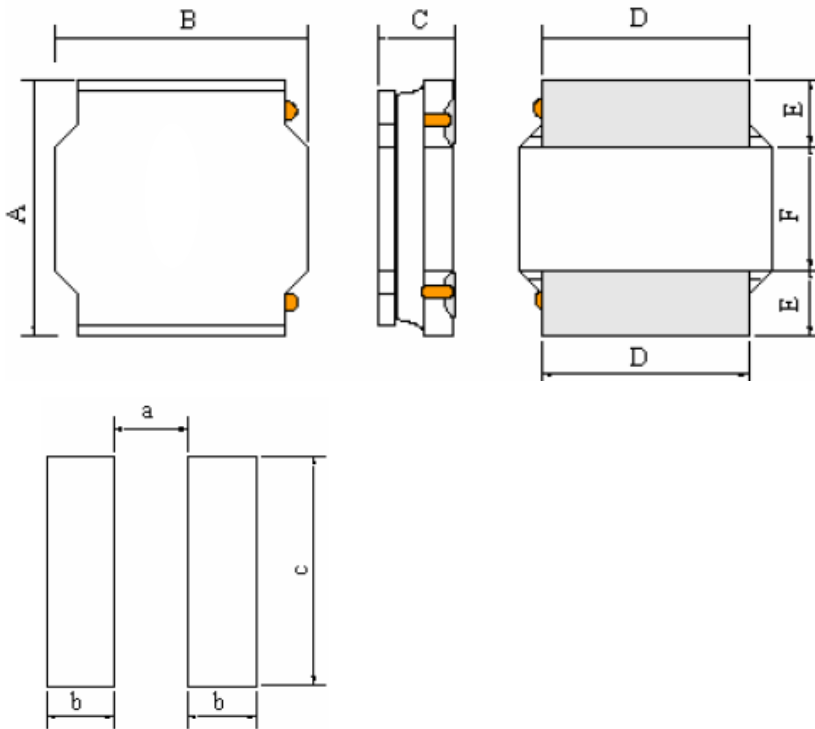
(Dimension data (Refer to Fig. 1))

Part Numbering System



3. SDB 0840T Series (Shielded Type)

Dimensions (mm)



Unit: mm

| | |
|---|-----------|
| A | 8.0±0.3 |
| B | 8.0±0.3 |
| C | 4.0±0.3 |
| D | 6.4 Typ. |
| E | 2.00 Typ. |
| F | 4.0 Typ. |
| a | 3.6 Typ. |
| b | 2.4 Typ. |
| c | 7.5 Typ. |

Construction & Material:

1. Ferrite Core: Ni-Zn Ferrite
2. Wire: Polyurethane system enameled copper wire
3. Magnetic Glue: Epoxy resin and magnetic powder
4. Plating Electrodes: Plating: Ag/Ni/Sn
5. Outer Electrodes: Top surface solder coating: Sn/Ag/Cu
6. Product comply with RoHS' requirement

3. SDB 0840T Series (Shielded Type)**Electrical Characteristics**

| Part No | L (μ H) | Tolerance | Test Condition | DCR (Ω) \pm 30% | Isat (A) max. | Irms (A) max. |
|--------------|-----------------|-----------|-------------------|-------------------------------|------------------|------------------|
| SDB0840T-R90 | 0.9 | M, N | 100KHz, 0.5V | 0.006 | 11.00 | 7.80 |
| SDB0840T-1R0 | 1.0 | M, N | 100KHz, 0.5V | 0.006 | 11.00 | 7.80 |
| SDB0840T-1R4 | 1.4 | M, N | 100KHz, 0.5V | 0.007 | 9.00 | 7.00 |
| SDB0840T-1R5 | 1.5 | M, N | 100KHz, 0.5V | 0.010 | 8.15 | 5.65 |
| SDB0840T-2R0 | 2.0 | M, N | 100KHz, 0.5V | 0.009 | 7.40 | 6.30 |
| SDB0840T-2R2 | 2.2 | M, N | 100KHz, 0.5V | 0.009 | 7.40 | 6.30 |
| SDB0840T-2R8 | 2.8 | M, N | 100KHz, 0.5V | 0.014 | 5.80 | 5.10 |
| SDB0840T-3R3 | 3.3 | M, N | 100KHz, 0.5V | 0.015 | 5.30 | 4.90 |
| SDB0840T-3R6 | 3.6 | M, N | 100KHz, 0.5V | 0.015 | 5.30 | 4.90 |
| SDB0840T-3R8 | 3.8 | M, N | 100KHz, 0.5V | 0.015 | 5.30 | 4.90 |
| SDB0840T-4R7 | 4.7 | M, N | 100KHz, 0.5V | 0.018 | 4.70 | 4.10 |
| SDB0840T-6R8 | 6.8 | M, N | 100KHz, 0.5V | 0.025 | 4.00 | 3.70 |
| SDB0840T-8R2 | 8.2 | M, N | 100KHz, 0.5V | 0.028 | 4.20 | 3.45 |
| SDB0840T-100 | 10 | M, N | 100KHz, 0.5V | 0.034 | 3.40 | 3.10 |
| SDB0840T-150 | 15 | M, N | 100KHz, 0.5V | 0.050 | 2.70 | 2.40 |
| SDB0840T-220 | 22 | M, N | 100KHz, 0.5V | 0.066 | 2.20 | 2.20 |
| SDB0840T-270 | 27 | M, N | 100KHz, 0.5V | 0.083 | 2.00 | 2.00 |
| SDB0840T-330 | 33 | M, N | 100KHz, 0.5V | 0.100 | 1.90 | 1.70 |
| SDB0840T-470 | 47 | M, N | 100KHz, 0.5V | 0.150 | 1.50 | 1.40 |
| SDB0840T-680 | 68 | M, N | 100KHz, 0.5V | 0.230 | 1.20 | 1.10 |
| SDB0840T-101 | 100 | M, N | 100KHz, 0.5V | 0.290 | 1.00 | 1.00 |
| SDB0840T-151 | 150 | M, N | 100KHz, 0.5V | 0.480 | 0.95 | 0.85 |
| SDB0840T-221 | 220 | M, N | 100KHz, 0.5V | 0.660 | 0.85 | 0.80 |
| SDB0840T-331 | 330 | M, N | 100KHz, 0.5V | 1.020 | 0.68 | 0.64 |
| SDB0840T-471 | 470 | M, N | 100KHz, 0.5V | 1.260 | 0.60 | 0.50 |

Test equipment:

L HP4284A LCR meter

DCR: Milli-ohm meter

Electrical specifications at 20°C

Characteristics

Isat : DC current at which the inductance drops approximate 30% from its value without current

Irms : The DC current is inductor surface temperature to rise by 40°C (Reference ambient temperature 20°C).

Operating temperature range: -40~125°C