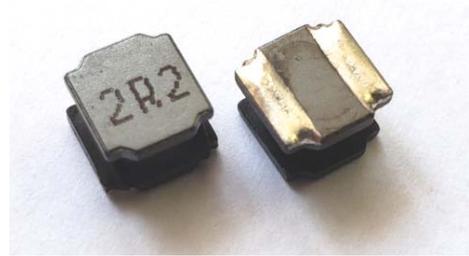


**3. SDB 0645T Series (Shielded Type)**

**Applications**

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



**Features**

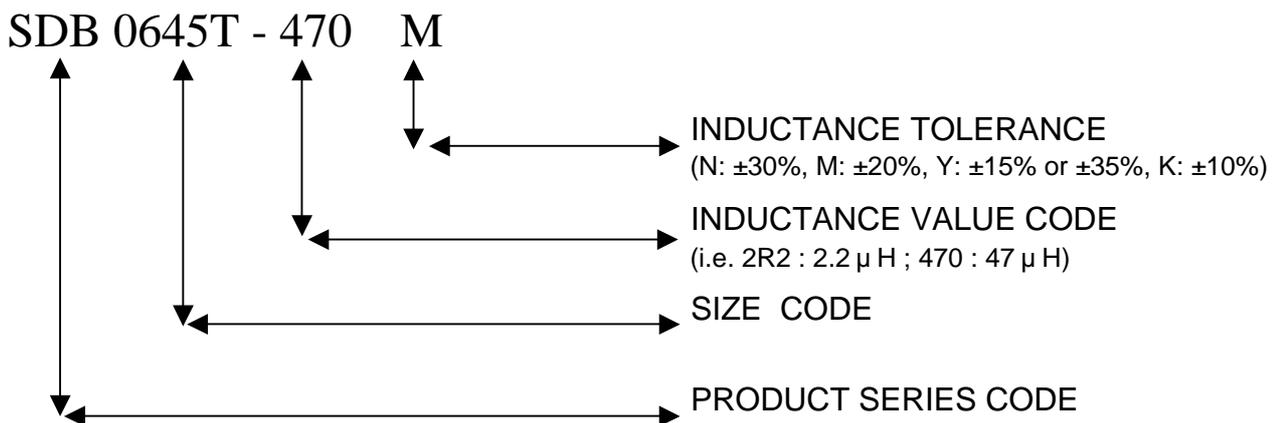
- Compact, low profile with low Rdc and large current.
- With magnetic shielded against radiation.
- Flat bottom surface allows reliable mounting onto the board.
- Available on tape and reel for auto surface mounting.

**Inductance and Rated Current ranges**

Part Series	Inductances range	Rated Current range
* SDB0645T	0.82~1000 $\mu$ H	5.9~0.20A (Irms) ; 10.35~0.30A (Isat)

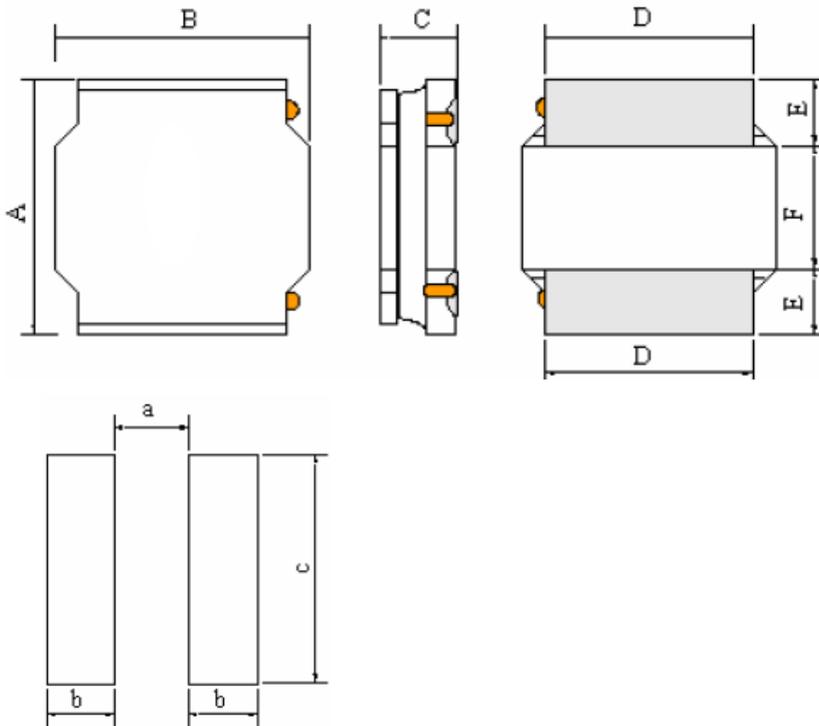
*(Dimension data (Refer to Fig. 1))*

**Part Numbering System**



3. SDB 0645T Series (Shielded Type)

Dimensions (mm)



Unit: mm

A	6.0±0.3
B	6.0±0.3
C	4.5 Max.
D	5.0 Typ.
E	1.50 Typ.
F	3.0 Typ.
a	2.6 Typ.
b	1.9 Typ.
c	5.7 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 0645T Series (Shielded Type)****Electrical Characteristics**

Part No	L ( $\mu$ H)	Tolerance	Test Condition	DCR ( $\Omega$ ) $\pm$ 30%	Isat (A) max.	Irms (A) max.
SDB0645T-R82	0.82	M, N	100KHz, 0.5V	0.008	10.35	5.90
SDB0645T-1R0	1.0	M, N	100KHz, 0.5V	0.014	8.50	5.14
SDB0645T-1R3	1.3	M, N	100KHz, 0.5V	0.016	8.00	5.05
SDB0645T-1R8	1.8	M, N	100KHz, 0.5V	0.018	7.00	4.95
SDB0645T-2R2	2.2	M, N	100KHz, 0.5V	0.021	6.00	4.60
SDB0645T-3R0	3.0	M, N	100KHz, 0.5V	0.024	5.00	3.80
SDB0645T-3R3	3.3	M, N	100KHz, 0.5V	0.024	5.00	3.70
SDB0645T-4R5	4.5	M, N	100KHz, 0.5V	0.031	4.00	3.30
SDB0645T-4R7	4.7	M, N	100KHz, 0.5V	0.031	4.00	3.30
SDB0645T-6R3	6.3	M, N	100KHz, 0.5V	0.035	3.80	3.15
SDB0645T-6R8	6.8	M, N	100KHz, 0.5V	0.038	3.80	3.00
SDB0645T-8R2	8.2	M, N	100KHz, 0.5V	0.043	3.50	2.70
SDB0645T-100	10	M, N	100KHz, 0.5V	0.047	3.20	2.45
SDB0645T-150	15	M, N	100KHz, 0.5V	0.077	2.50	2.05
SDB0645T-220	22	M, N	100KHz, 0.5V	0.115	2.05	1.80
SDB0645T-330	33	M, N	100KHz, 0.5V	0.145	1.65	1.45
SDB0645T-390	39	M, N	100KHz, 0.5V	0.210	1.50	1.25
SDB0645T-470	47	M, N	100KHz, 0.5V	0.220	1.40	1.20
SDB0645T-560	56	M, N	100KHz, 0.5V	0.260	1.30	1.10
SDB0645T-680	68	M, N	100KHz, 0.5V	0.330	1.20	1.00
SDB0645T-820	82	M, N	100KHz, 0.5V	0.450	1.05	0.90
SDB0645T-101	100	M, N	100KHz, 0.5V	0.500	0.95	0.80
SDB0645T-151	150	M, N	100KHz, 0.5V	0.800	0.80	0.70
SDB0645T-181	180	M, N	100KHz, 0.5V	0.950	0.75	0.65
SDB0645T-221	220	M, N	100KHz, 0.5V	1.200	0.70	0.59
SDB0645T-331	330	M, N	100KHz, 0.5V	1.700	0.57	0.57
SDB0645T-102	1000	M, N	100KHz, 0.5V	4.500	0.30	0.20

– 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