

3. SDB 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
* SDB3010	1.0~47 μ H	1.525~0.270A (Irms) ; 1.700~0.240A (Isat)
* SDB3015	1.0~100 μ H	2.100~0.250A (Irms) ; 2.100~0.230A (Isat)

(Dimension data (Refer to Fig. 1))

Part Series	Inductances range	Rated Current range
* SDB3D12	1.0~33 μ H	2.000~0.420A (Irms) ; 2.300~0.420A (Isat)
* SDB3D15	0.5~47 μ H	2.500~0.350A (Irms) ; 3.100~0.340A (Isat)
* SDB3D18	1.0~100 μ H	2.400~0.360A (Irms) ; 2.600~0.260A (Isat)

(Dimension data (Refer to Fig. 2))

Part Series	Inductances range	Rated Current range
* SDB0410T	1.00~22 μ H	1.900~0.500A (Irms) ; 2.000~0.450A (Isat)
* SDB0430T	1.00~120 μ H	4.150~0.550A (Irms) ; 5.260~0.570A (Isat)

(Dimension data (Refer to Fig. 3))

Part Series	Inductances range	Rated Current range
* SDB6028	0.9~100 μ H	4.600~0.660A (Irms) ; 6.700~0.650A (Isat)
* SDB6045	1.0~220 μ H	6.500~0.500A (Irms) ; 8.600~0.550A (Isat)

(Dimension data (Refer to Fig. 4))

Part Series	Inductances range	Rated Current range
* SDB5D28	2.5~100 μ H	2.600~0.400A
* SDB1003	2.2~470 μ H	5.600~0.480A
* SDB1004	1.2~1000 μ H	10.000~0.320A

(Dimension data (Refer to Fig. 5))

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Dimensions (mm)

Unit: mm

A	4.0±0.2
B	4.0±0.2
C	1.0 Max.
E	3.50 Max.
F	1.15 Max.
G	2.30 Max.
H	3.7 Typ.
I	1.2 Typ.
J	1.6 Typ.

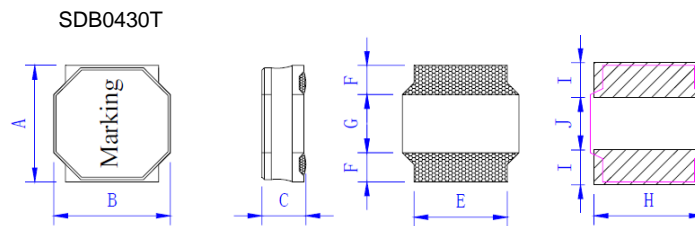
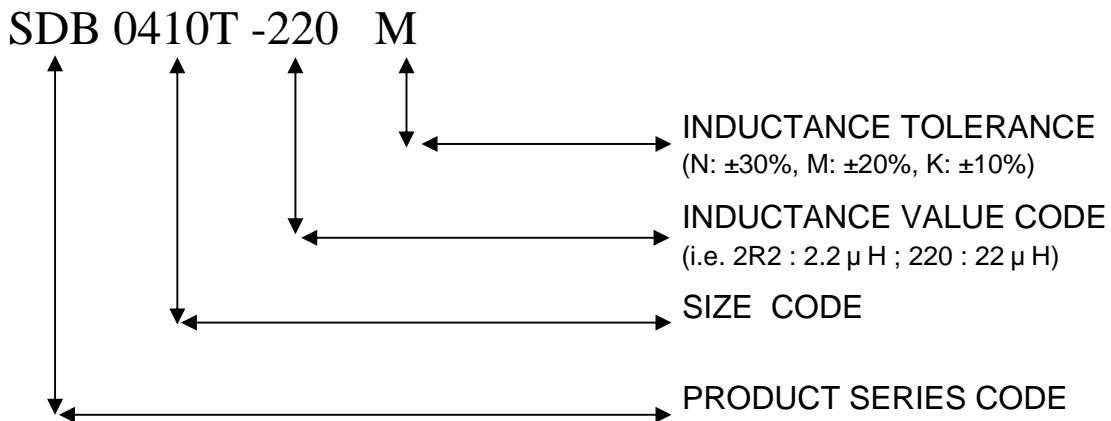


Fig. 3

Part Numbering System



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Electrical Characteristics

SDB0410T Type

Part No	L (µH)	Tolerance	Test Condition	DCR (Ω) ±30%.	Isat (A) max.	Irms (A) max.
SDB0410T-1R0N	1.0	+/-30%	100KHz, 0.25V	0.056	2.00	1.90
SDB0410T-1R5N	1.5	+/-30%	100KHz, 0.25V	0.070	1.68	1.70
SDB0410T-2R2M	2.2	+/-20%	100KHz, 0.25V	0.085	1.20	1.50
SDB0410T-3R3M	3.3	+/-20%	100KHz, 0.25V	0.100	1.10	1.40
SDB0410T-4R7M	4.7	+/-20%	100KHz, 0.25V	0.140	0.95	1.20
SDB0410T-6R8M	6.8	+/-20%	100KHz, 0.25V	0.200	0.80	1.00
SDB0410T-100M	10	+/-20%	1KHz, 0.25V	0.300	0.62	0.75
SDB0410T-220M	22	+/-20%	1KHz, 0.25V	0.570	0.45	0.50

Notes:

- 1a). Isat: DC current at which the inductance drops approx. 30% from its value without current
- 1b). Irms: The DC current is inductor surface temperature to rise by 40
- 2. Test equipment :
 - L/Q : HP4284A LCR meter
 - DCR: Milli-ohm meter.
- 3. Operating temperature range : -40 ~+125