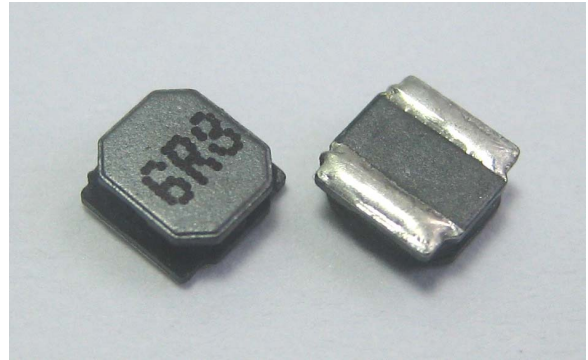


### 3. SDB0420T Series (Shielded Type)

#### Applications

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



#### Features

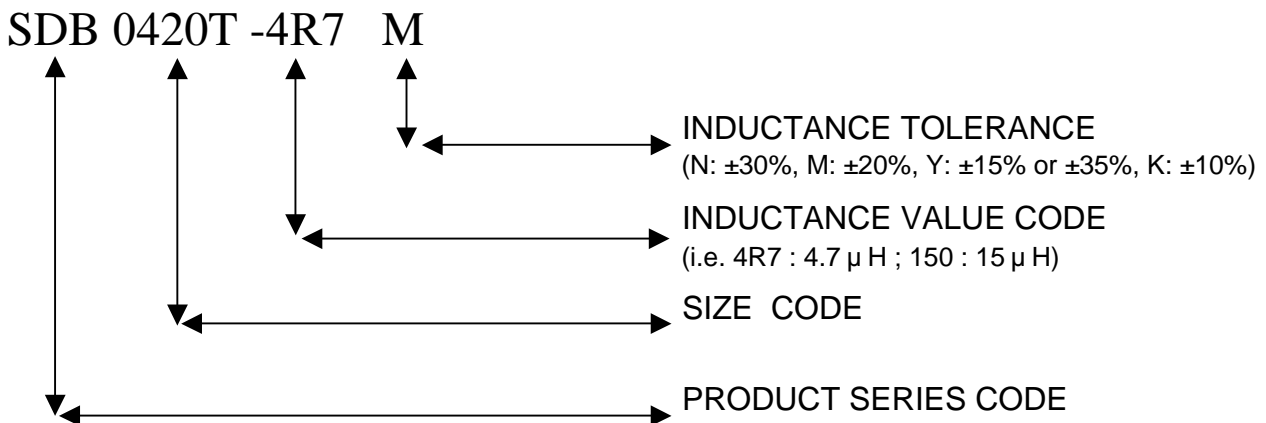
- Compact, low profile with low Rdc and large current.
- With magnetic shielded against radiation.
- Flat bottom surface allows reliable mounting onto the board.
- Available on tape and reel for auto surface mounting.

#### Inductance and Rated Current ranges

Part Series	Inductances range	Rated Current range
* SDB0420T	0.33~100μH	3.30~0.31A (Irms) ; 7.50~0.48A (Isat)

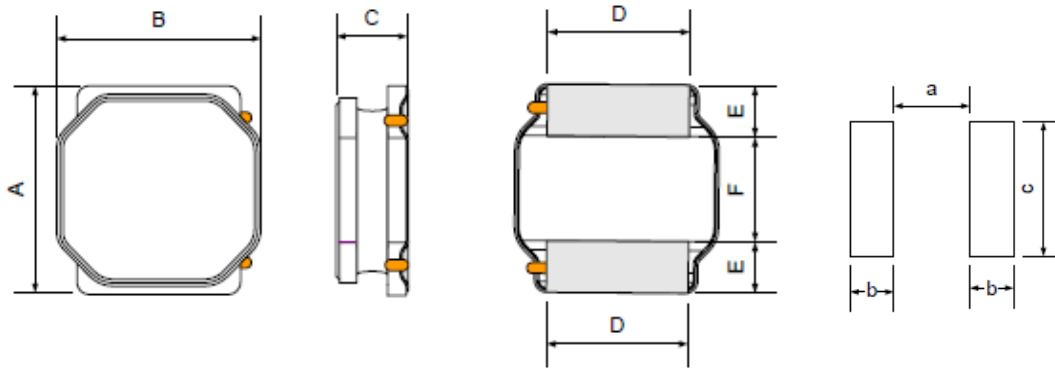
(Dimension data (Refer to Fig. 1))

#### Part Numbering System



3. SDB0420T Series (Shielded Type)

Dimensions (mm)



Unit: mm

A	4.0±0.2
B	4.0±0.2
C	2.0Max.
D	3.4 Typ.
E	1.2 Typ.
F	1.6 Typ.
a	1.6 Typ.
b	1.4 Typ.
c	3.6 Typ.

Fig. 1

**3. SDB0420T Series (Shielded Type)****Electrical Characteristics****SDB0420T Type**

Part No	L ( $\mu$ H)	Tolerance	Test Condition	DCR ( $\Omega$ ) $\pm$ 30%	Isat (A) max.	Irms (A) max.
SDB0420T - R33	0.33	M , N	100KHz, 0.5V	0.013	7.50	3.30
SDB0420T - R47	0.47	M , N	100KHz, 0.5V	0.022	7.00	3.30
SDB0420T - R68	0.68	M , N	100KHz, 0.5V	0.028	6.40	2.80
SDB0420T - 1R0	1.0	M , N	100KHz, 0.5V	0.029	4.78	2.15
SDB0420T - 1R5	1.5	M , N	100KHz, 0.5V	0.035	4.45	1.98
SDB0420T - 2R2	2.2	M , N	100KHz, 0.5V	0.040	3.40	1.85
SDB0420T - 3R3	3.3	M , N	100KHz, 0.5V	0.070	3.20	1.40
SDB0420T - 4R7	4.7	M , N	100KHz, 0.5V	0.075	2.35	1.34
SDB0420T - 5R1	5.1	M , N	100KHz, 0.5V	0.085	2.30	1.27
SDB0420T - 5R6	5.6	M , N	100KHz, 0.5V	0.090	2.20	1.22
SDB0420T - 6R8	6.8	M , N	100KHz, 0.5V	0.125	2.20	1.04
SDB0420T - 8R2	8.2	M , N	100KHz, 0.5V	0.155	1.75	1.04
SDB0420T - 100	10	M , N	100KHz, 0.5V	0.165	1.60	0.90
SDB0420T - 150	15	M , N	100KHz, 0.5V	0.230	1.35	0.77
SDB0420T - 220	22	M ,N	100KHz, 0.5V	0.350	1.05	0.62
SDB0420T - 270	27	M , N	100KHz, 0.5V	0.545	1.02	0.50
SDB0420T - 330	33	M ,N	100KHz, 0.5V	0.550	0.85	0.49
SDB0420T - 390	39	M , N	100KHz, 0.5V	0.650	0.82	0.46
SDB0420T - 470	47	M ,N	100KHz, 0.5V	0.710	0.74	0.44
SDB0420T - 560	56	M , N	100KHz, 0.5V	0.800	0.66	0.41
SDB0420T - 680	68	M ,N	100KHz, 0.5V	1.060	0.61	0.36
SDB0420T - 820	82	M ,N	100KHz, 0.5V	1.170	0.50	0.34
SDB0420T - 101	100	M ,N	100KHz, 0.5V	1.550	0.48	0.31

**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
- Test equipment:
  - L HP4284A LCR meter
  - DCR: Milli-ohm meter
- Electrical specifications at 20°C