Shielded SMD Power Inductor-PSDB

Features

- Directly connected electrode on ferrite core.
- High power, High saturation inductors.
- Ideal inductors for DC/DC converters.
- With magnetic shielded against.
- Available on tape and reel for automatic surface mounting.

Inductance and rated current ranges

PSDB5D28	2.5～10μH	2.6～0.4A
PSDB1003	10～150μH	2.7～0.7A
PSDB1004	1.3～330μH	10～0.7A
PSDB1005	10～1000μH	3.45～0.35A

Applications

- Power supply for VTRs
- LCD televisions
- Notebook PCs
- Portable communication
- DC/DC converters, etc

Product Identification

PSDB 5D28 M T 101

(1) (2) (3) (4) (5)

(1)Type: SMD Power Inductors

(2)Dimensions (mm): 5D28=6.2×6.3×3.0, 1003=10.3×10.4×3.0, 1004=10.3×10.4×4.0, 1005=10.3×10.4×5.0

(3)Tolerance: N=30%

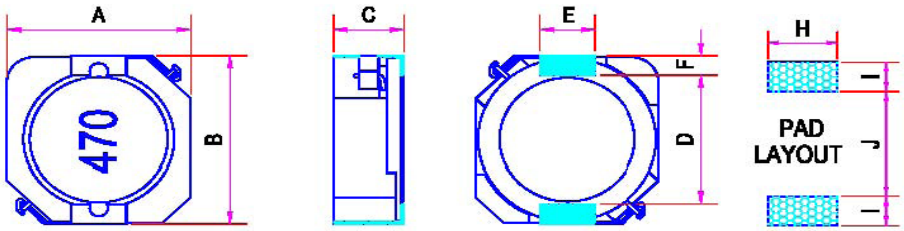
(4) Packaging style: T (Tape and Reel)

(5) Inductance: 1R1=1.1μH, 470=47μH, 101 =100μH

Characteristics:

- Rated DC current: The current when the inductance decreases to 75% (5D28 and1004 decreases to 65%) of its initial value or the actual current when the temperature of coil increases to ▵40℃. The smaller one is defined as Rated DC Current. (Ta=25℃)
- Operating temperature range: -30～80℃.

Dimension



Unit: mm

Codes	A	B	C	D	E	F	H	I	J
PSDB5D28	6.2	6.3	3.0	4.7	2.0	0.6	2.6	1.0	4.6
PSDB1003	10.3	10.4	3.0	7.7	3.0	1.2	3.6	1.7	7.3
PSDB1004	10.3	10.4	4.0	7.7	3.0	1.2	3.6	1.7	7.3
PSDB1005	10.3	10.4	5.0	7.7	3.0	1.2	3.6	1.7	7.3

Electrical Characteristics

PSDB 5D28 / 1003 / 1004 / 1005 TYPE

Part No.	L (μH)	DC Resistance (mΩ)Max				Rated DC Current (A) Max			
		5D28	1003	1004	1005	5D28	1003	1004	1005
1R3N	1.3	-	-	8.1	-	-	-	10.0	-
2R5N	2.5	17.6	-	10	-	2.60	-	7.50	-
3R3N	3.3	20.3	-	-	-	2.30	-	-	-
3R8N	3.8	-	-	13	-	-	-	6.00	-
4R0N	4.0	27.0	-	-	-	2.10	-	-	-
5R0N	5.0	31.1	-	-	-	1.85	-	-	-
5R2N	5.2	-	-	22	-	-	-	5.50	-
6R0N	6.0	41.9	-	-	-	1.70	-	-	-
7R0N	7.0	-	-	27	-	-	-	4.80	-
8R0N	8.0	49.9	-	-	-	1.50	-	-	-
100N	10	54.0	58.1	35	25.8	1.30	2.70	4.40	3.45
120N	12	71.6	72.1	-	32.0	1.20	2.25	-	3.40
150N	15	82.4	86.5	50	40.0	1.10	2.22	3.60	2.83
180N	18	101.5	116.1	-	46.0	1.05	1.90	-	2.62
220N	22	119.0	145.4	73	58.5	0.95	1.78	2.90	2.44
270N	27	146.0	175.9	-	65.4	0.85	1.63	-	2.24
330N	33	182.5	213.4	93	81.4	0.76	1.16	2.30	1.88
390N	39	209.5	268.9	-	103.1	0.68	1.32	-	1.70
470N	47	229.5	298.6	128	122.1	0.60	1.18	2.10	1.56
560N	56	305.0	335.8	-	144.8	0.55	1.10	-	1.39
680N	68	351.0	451.3	213	193.0	0.48	1.04	1.50	1.36
820N	82	418.5	513.8	-	219.4	0.45	0.94	-	1.20
101N	100	520.0	700.0	304	247.0	0.40	0.84	1.35	1.09
121N	120	-	765.0	-	298.4	-	0.76		1.00
151N	150	-	876.3	506	355.1	-	0.70	1.15	0.91
181N	180	-	-	-	393.4	-	-	-	0.84
221N	220	-	-	756	483.8	-	-	0.92	0.75
271N	270	-	-	-	632.5	-	-	-	0.68
331N	330	-	-	1090	780.0	-	-	0.70	0.60
391N	390	-	-	-	957.5	-	-	-	0.57
471N	470	-	-	-	1220.4	-	-	-	0.50
561N	560	-	-	-	1352.4				0.47
681N	680	-	-	-	1519.2				0.43
821N	820	-	-	-	1694.4				0.39
102N	1000	-	-	-	1946.4				0.35

Notes:
Measuring Frequency: 100KHz 0.1V
Tolerance of inductance: N±30%