Shielded SMD Power Inductor-PCDS

Applications

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

Features

- Silver Plated Type, Low cost design.
- 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

PCDS63B	10～68μH	1.0～0.42A
PCDS74B	10～270μH	1.65～0.33A
PCDS105B	10～470μH	2.06～0.33A
PCDS125B	10～820μH	2.65～0.36A

- Test equipment:

  L: HP4284A LCR meter @1kHz 0.25V

  L: HP4285A LCR meter @2.52M 0.25V

  DCR: Milli-ohm meter.

Product Identification

PCDS 63B M T 101

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

(1)Type: SMD Power Inductors

(2)Dimensions (mm): 63B=6.2×3.2, 74B=7.8×4.5, 105B=10.0×5.0, 125B=12.6×5.4

(3)Tolerance: M=20%, L=15%,K=10%

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

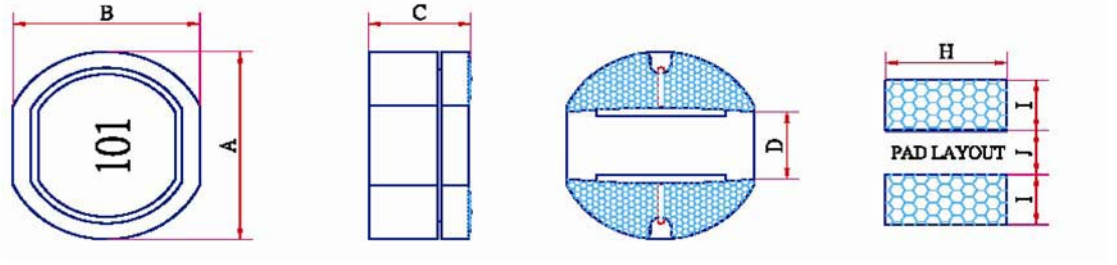
(5) Inductance: 1R1=1.1μH, 470=47μH, 101 =100μH

(6)Lead Free: F= Product with Lead-free terminal; Space= Lead Plating

Characteristics:

- Rated DC current: 63B~105B The current when the inductance decreases to 90% (125B decreases to 75%) 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: -20～80℃.

Dimension



Unit: mm

Codes	A	B	C	D	H	I	J
PCDS63B	6.2±0.30	5.6±0.30	3.2±0.30	1.70	5.50	2.25	1.70
PCDS74B	7.8±0.35	7.0±0.35	4.5±0.40	1.90	7.50	4.00	2.00
PCDS105B	10.0±0.40	9.0±0.40	5.0±0.50	2.50	9.50	5.00	2.50
PCDS125B	12.6±0.50	11.6±0.50	5.4±0.50	3.00	12.00	6.00	3.00

Electrical Characteristics

PCDS 63B / 74B / 105B / 125B TYPE

Part No.	L (μH)	DC Resistance (Ω)Max				Rated DC Current (A) Max			
		63B	74B	105B	125B	63B	74B	105B	125B
100	10	0.14	0.07	0.06	0.05	1.00	1.65	2.06	2.65
120	12	0.16	0.07	0.07	0.05	0.94	1.57	1.94	2.50
150	15	0.18	0.08	0.07	0.06	0.86	1.39	1.72	2.45
180	18	0.25	0.10	0.08	0.06	0.78	1.29	1.58	2.40
220	22	0.32	0.13	0.08	0.07	0.76	1.12	1.42	2.20
270	27	0.36	0.16	0.10	0.08	0.64	1.06	1.32	2.00
330	33	0.41	0.18	0.11	0.10	0.61	0.97	1.16	1.80
390	39	0.47	0.18	0.12	0.11	0.53	0.91	1.10	1.65
470	47	0.51	0.27	0.14	0.12	0.50	0.80	1.00	1.50
560	56	0.72	0.29	0.19	0.15	0.46	0.76	0.93	1.38
680	68	0.82	0.33	0.21	0.17	0.42	0.68	0.85	1.26
820	82	-	0.43	0.28	0.20	-	0.62	0.79	1.14
101	100	-	0.49	0.34	0.25	-	0.55	0.72	1.05
121	120		0.68	0.37	0.28		0.49	0.63	0.95
151	150	-	0.94	0.51	0.40	-	0.44	0.55	0.85
181	180	-	1.00	0.57	0.48	-	0.40	0.50	0.77
221	220	-	1.18	0.78	0.52	-	0.36	0.47	0.70
271	270	-	1.30	0.87	0.70	-	0.33	0.41	0.63
331	330	-	-	1.20	0.80	-	-	0.37	0.57
391	390	-	-	1.34	1.08	-	-	0.35	0.52
471	470	-	-	1.50	1.20	-	-	0.33	0.48
561	560	-	-	-	1.34	-	-	-	0.44
681	680	-	-	-	1.78	-	-	-	0.40
821	820	-	-	-	2.00	-	-	-	0.36

Note:

Measuring Freq.(L):10～82μH(2.52MHz 0.25V), 100～820μH(1KHz 0.25V)

Tolerance of Inductance :

PCDS63B	10~27μH±20%(M)	33~68μH±15%(L)	
PCDS74B	10~27μH±20%(M)	33~82μH±15%(L)	100~270μH±10%(K)
PCDS105B	10~27μH±20%(M)	33~82μH±15%(L)	100~470μH±10%(K)
PCDS125B	10~18μH±20%(M)	33~820μH +20%-15%(M)	

RoHS