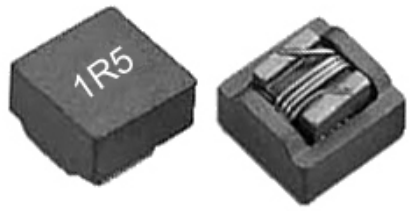
SMD Power Inductor－CPS



Inductance and rated current ranges

- CPS1008 1.0～100μH 2.00～0.30A
- Test equipment:

  L: HP4284A Precision LCR meter.

  DCR: Milli-ohm meter.

  Electrical Specification at 25℃

Features

- Shielded construction
- Economical alternative to larger and more costly power inductors.
- Ideal for use at switching frequencies form 50kHz to 1MHz

Applications

- Notebook / PC cards
- Wireless communication
- Handheld devices

Product Identification

CPS	1008	M	T	1R0
(1)	(2)	(3)	(4)	(5)

(1)Type: SMD Power Inductors

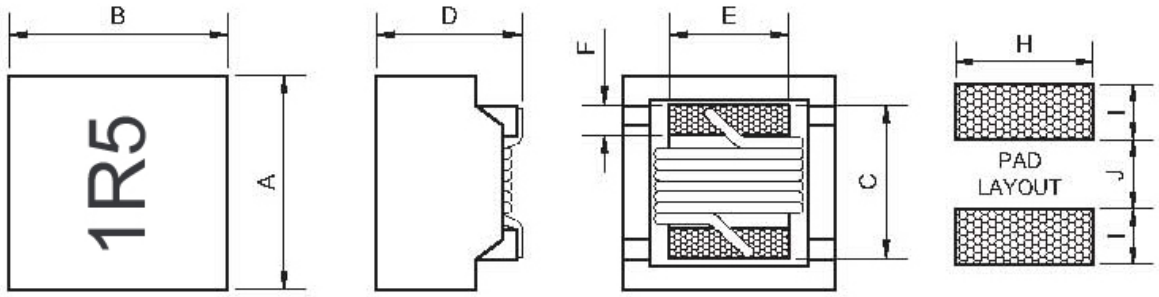
(2)Dimensions (mm):1008=3.81×3.81×2.54

(3)Tolerance: M=20%

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

(5) Inductance:1R0=1μH , 100=10μH

Dimension



Unit: mm

Codes	A Max	B Max	C Max	D Max	E (Ref.)	F (Ref.)	H (Ref.)	I (Ref.)	J (Ref.)
CPS1008	3.81	3.81	2.74	3.20	2.11	0.51	2.54	1.02	1.27

Electrical Characteristics

Part No.	L (μH)	Tol. (%)	Q Ref.	DC Resistance (mΩ) Max	SRF Ref. (MHZ)	Rated DC Current (A) Max	
						I sat	I rms
CPS1008MT1R0	1.0	20	35	0.05	344	3.0	2.00
CPS1008MT1R5	1.5	20	35	0.08	260	2.8	2.00
CPS1008MT1R8	1.8	20	35	0.135	225	2.1	1.90
CPS1008MT2R7	2.7	20	38	0.20	185	1.3	1.60
CPS1008MT3R9	3.9	20	38	0.26	175	1.2	1.20
CPS1008MT4R7	4.7	20	38	0.35	160	1.0	1.10
CPS1008MT5R6	5.6	20	38	0.36	150	1.0	0.90
CPS1008MT6R8	6.8	20	38	0.58	120	0.84	0.80
CPS1008MT100	10	20	38	0.92	105	0.78	0.72
CPS1008MT150	15	20	38	1.15	35	0.70	0.60
CPS1008MT220	22	20	40	1.40	26	0.65	0.55
CPS1008MT330	33	20	45	2.0	20	0.51	0.50
CPS1008MT390	39	20	45	2.2	16	0.45	0.47
CPS1008MT470	47	20	45	2.5	19	0.40	0.42
CPS1008MT680	68	20	45	3.8	12	0.31	0.32
CPS1008MT820	82	20	45	4.3	9	0.30	0.30
CPS1008MT101	100	20	45	5.8	7	0.30	0.30

Note: 1. Test Frequency 100 kHz 0.1Vrms.

2. Rated DC Current: Isat : The current when the inductance decrease to 90% of its initial value.
Irms: The current when the temperature of coil increases to ▵40℃. (Ta=25℃)

3.Operating temperature range -40～85℃.