



CSMS0512D Series SMD WIRE WOUND POWER INDUCTORS (SHIELDED)

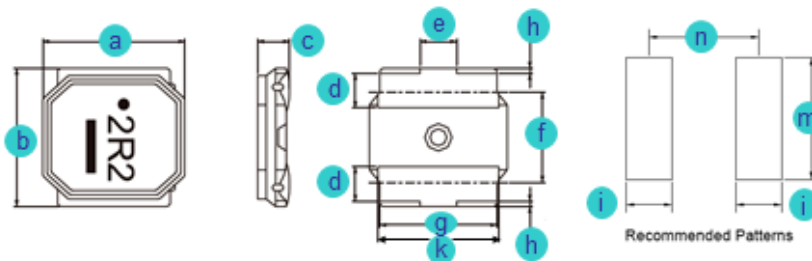
Rev. A

A. Electrical Specifications:

P/N	Marking	Inductance @100KHz (μH)	Inductance Tolerance	DCR ±20%(Ω)	Rated Current (mA)		SRF Min. (MHz)
					I sat	I rms	
CSMS0512D-1R0N	1R0	1.0	± 30%	0.053	4500	2300	100
CSMS0512D-1R5N	1R5	1.5	± 30%	0.070	3800	2200	86
CSMS0512D-2R2M	2R2	2.2	± 20%	0.085	3100	2000	70
CSMS0512D-3R3M	3R3	3.3	± 20%	0.160	2400	1450	48
CSMS0512D-4R7M	4R7	4.7	± 20%	0.180	2200	1400	40
CSMS0512D-6R8M	6R8	6.8	± 20%	0.260	1700	1100	36
CSMS0512D-100M	100	10	± 20%	0.420	1400	850	26
CSMS0512D-150M	150	15	± 20%	0.670	1200	640	22

B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g	h	i	k	m	n
CSMS0512D	4.9 (0.193)	4.9 (0.193)	1.2 (0.047)	1.2 (0.047)	1.3 (0.051)	3.3 (0.130)	3.8 (0.150)	0.2 (0.008)	1.5 (0.059)	4.2 (0.165)	4.0 (0.157)	3.6 (0.142)
Tol.	±0.2 (0.008)	±0.2 (0.008)	Max.	±0.2 (0.008)	Typ.	±0.2 (0.008)	Typ.	Typ.	Typ.	Typ.	Typ.	Typ.



C. General Information:

1. CSMS0512D-xxx_, "CSMS0512D" = P/N, "xxx" = Inductance, "_" = Tolerance.
2. Tolerance "_": M: ± 20%, N: ± 30%
3. Magnetically shielded
4. High saturation current
5. Storage temperature: -40°C to +85°C.
6. Operating temperature range: -25°C to +125°C (Including self-heating).
7. Inductance measured using the HP4285A and Chroma1320 & 3302.
8. DCR measured using Chroma 16502.
9. SRF measured using the HP4291B.
10. Saturation Current Idc1: The value of current causes a 30% Inductance reduction from initial value. (at : 20 °C ambient)
11. Temperature rise current Idc2: The value of current causes a 40°C temperature rise. (at : 20 °C ambient)
12. Rated Current: Either Idc1 or Idc2 whichever is smaller.
13. MSL: Level 1.
14. Inductance and Current range: From 1.0 μH (2300mA) to 15.0 μH (640mA).

D. Applications:

1. Game Consoles
2. Set Top Boxes
3. Cables Modems
4. Computers
5. Mobile Communication Devices (Cell Phones, Radios, etc.)
6. PDA, LCD, DVD, BRP, HD.

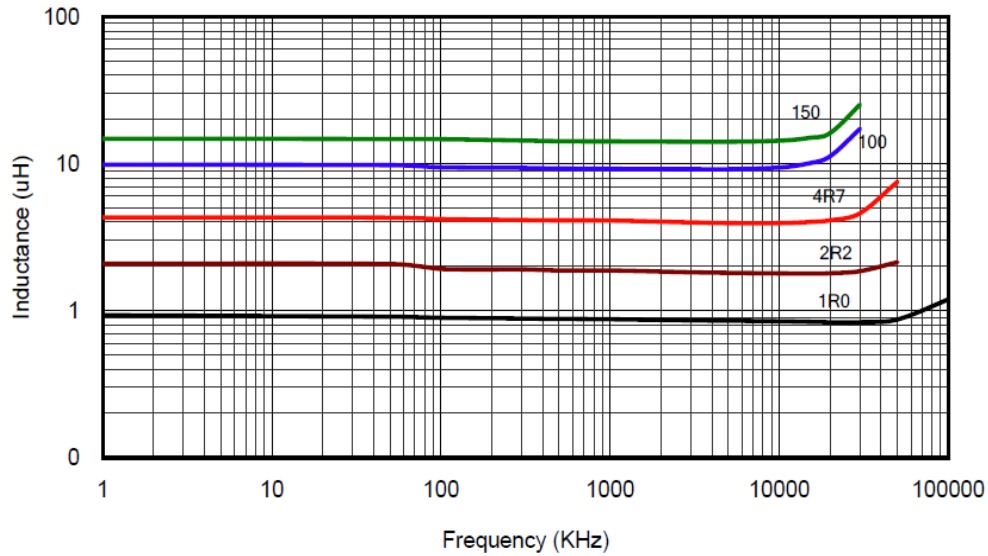


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E. Characteristics Curve:

Inductance vs. Frequency



Inductance vs. DC Current

