



CSMS0412D Series SMD WIRE WOUND POWER INDUCTORS (SHIELDED)

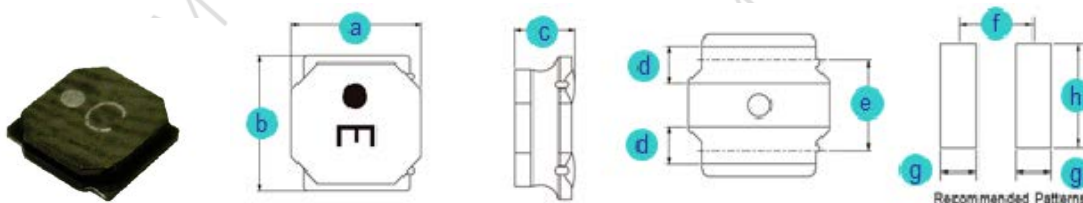
Rev. A

A. Electrical Specifications:

P/N	Marking	Inductance @100KHz (μ H)	Inductance Tolerance	DCR $\pm 20\%$ (Ω)	Rated Current (mA)		SRF Min. (MHz)
					I sat	I rms	
CSMS0412D-1R0N	A	1.0	$\pm 30\%$	0.042	2800	2200	100
CSMS0412D-2R2M	C	2.2	$\pm 20\%$	0.060	1650	1900	70
CSMS0412D-3R3M	E	3.3	$\pm 20\%$	0.070	1400	1700	60
CSMS0412D-4R7M	H	4.7	$\pm 20\%$	0.095	1200	1500	45
CSMS0412D-6R8M	I	6.8	$\pm 20\%$	0.125	900	1300	35
CSMS0412D-100M	K	10	$\pm 20\%$	0.170	800	1100	30
CSMS0412D-150M	M	15	$\pm 20\%$	0.260	650	750	24
CSMS0412D-220M	N	22	$\pm 20\%$	0.400	500	620	18

B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g	h
CSMS0412D	4.0 (0.157)	4.0 (0.157)	1.2 (0.047)	1.1 (0.043)	2.5 (0.098)	2.8 (0.110)	1.2 (0.047)	3.7 (0.146)
Tol.	± 0.2 (0.008)	± 0.2 (0.008)	Max.	± 0.2 (0.008)	± 0.2 (0.008)	Typ.	Typ.	Typ.



C. General Information:

1. CSMS0412D-xxx_, "CSMS0412D" = P/N, "xxx" = Inductance, "_" = Tolerance.
2. Tolerance "_": M: $\pm 20\%$, N: $\pm 30\%$
3. Magnetically shielded
4. High saturation current
5. Storage temperature: -40°C to $+85^{\circ}\text{C}$.
6. Operating temperature range: -25°C to $+125^{\circ}\text{C}$ (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 (2200mA) to 22.0 μH (620mA).

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.



CSMS0412D Series SMD WIRE WOUND POWER INDUCTORS (SHIELDED)

Rev. A

E. Characteristics Curve:

