



CSMS0612D Series SMD WIRE WOUND POWER INDUCTORS (SHIELDED)

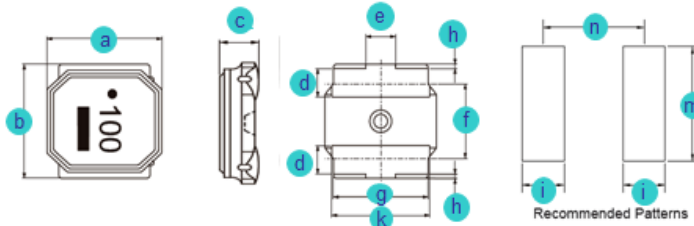
Rev. A

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	
CSMS0612D-2R5N	2R5	2.5	$\pm 30\%$	0.090	2100	1800	45
CSMS0612D-3R3N	3R3	3.3	$\pm 30\%$	0.105	1800	1700	42
CSMS0612D-4R7M	4R7	4.7	$\pm 20\%$	0.125	1600	1550	36
CSMS0612D-5R3M	5R3	5.3	$\pm 20\%$	0.125	1500	1550	34
CSMS0612D-6R8M	6R8	6.8	$\pm 20\%$	0.165	1300	1350	30
CSMS0612D-100M	100	10	$\pm 20\%$	0.200	1000	1200	22
CSMS0612D-150M	150	15	$\pm 20\%$	0.295	800	800	18
CSMS0612D-220M	220	22	$\pm 20\%$	0.465	760	650	12
CSMS0612D-330M	330	33	$\pm 20\%$	0.580	590	550	8
CSMS0612D-470M	470	47	$\pm 20\%$	0.965	520	460	6
CSMS0612D-680M	680	68	$\pm 20\%$	1.160	440	410	3
CSMS0612D-101M	101	100	$\pm 20\%$	1.670	350	320	1

B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g	h	i	k	m	n
CSMS0612D	6.0 (0.236)	6.0 (0.236)	1.2 (0.047)	1.35 (0.053)	2.3 (0.091)	4.0 (0.157)	4.8 (0.189)	0.3 (0.012)	1.6 (0.063)	5.2 (0.205)	5.7 (0.224)	4.7 (0.185)
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. CSMS0612D-xxx_, "CSMS0612D" = 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 $2.5 \mu\text{H}$ (1800mA) to $100.0 \mu\text{H}$ (320mA).

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.

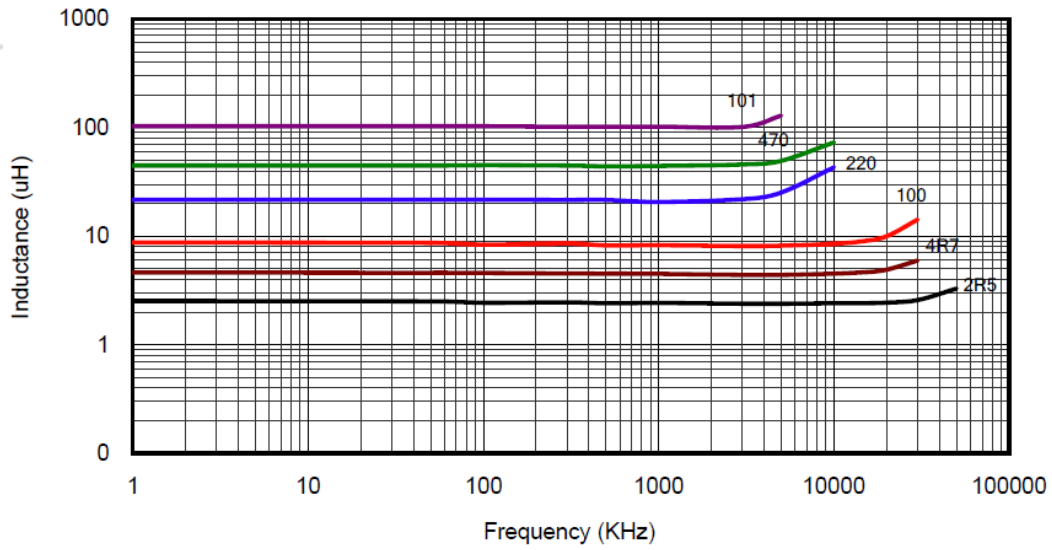


CSMS0612D Series SMD WIRE WOUND POWER INDUCTORS (SHIELDED)

Rev. A

E. Characteristics Curve:

Inductance vs. Frequency



Inductance vs. DC Current

