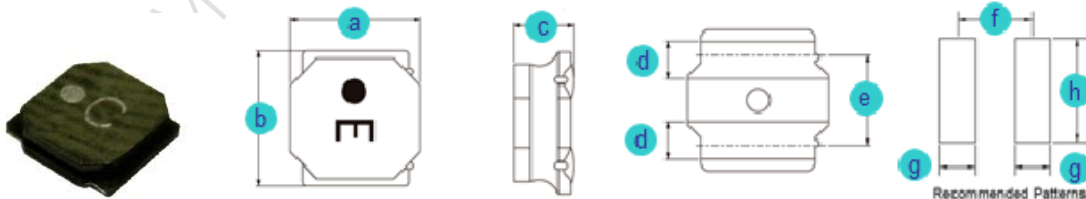


A. Electrical Specifications:

P/N	Marking	Inductance @100KHz (μH)	Inductance Tolerance	DCR ±20%(Ω)	Rated Current (A)		SRF Min. (MHz)
					I sat	I rms	
CSMS0412D-1R0N	A	1.0	N	0.042	2.800	2.200	100
CSMS0412D-2R2M	C	2.2	M	0.060	1.650	1.900	70
CSMS0412D-3R3M	E	3.3	M	0.070	1.400	1.700	60
CSMS0412D-4R7M	H	4.7	M	0.095	1.200	1.500	45
CSMS0412D-6R8M	I	6.8	M	0.125	0.900	1.300	35
CSMS0412D-100M	K	10	M	0.170	0.800	1.100	30
CSMS0412D-150M	M	15	M	0.260	0.650	0.750	24
CSMS0412D-220M	N	22	M	0.400	0.500	0.620	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.



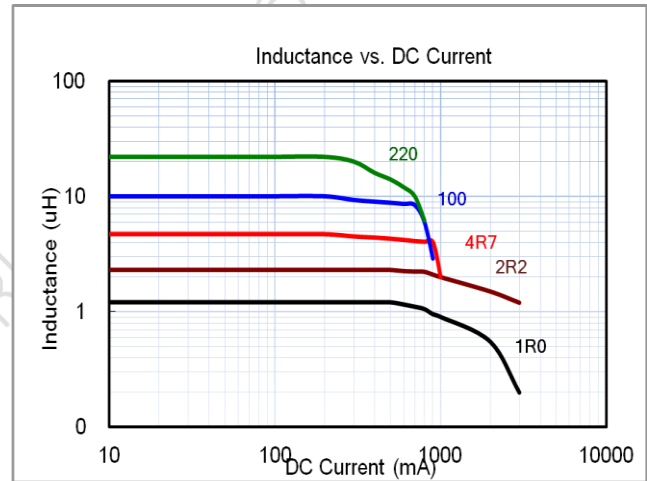
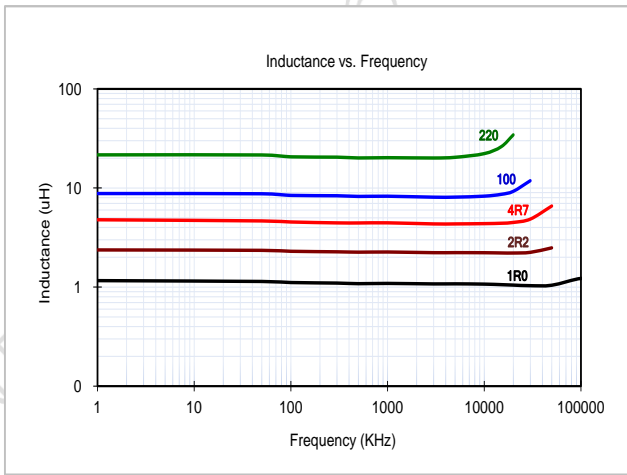
C. General Information:

- CSMS0412D-xxx, “CSMS0412D” = P/N, “xxx” = Inductance, “_” = Tolerance.
- Tolerance “_”: N = ± 30%, M = ± 20%.
- Magnetically shielded
- High saturation current
- Storage temperature: -40°C to +85°C.
- Operating temperature range: -25°C to +125°C (Including self-heating).
- Inductance measured using the HP4285A and Chroma1320 & 3302.
- DCR measured using Chroma 16502.
- SRF measured using the HP4291B.
- Saturation Current Idc1: The value of current causes a 30% Inductance reduction from initial value. (at : 20 °C ambient)
- Temperature rise current Idc2: The value of current causes a 40°C temperature rise. (at : 20 °C ambient)
- Rated Current: Either Idc1 or Idc2 whichever is smaller.
- MSL: Level 1.
- Inductance and Current range: From 1.0 μH (2.2 A) to 22.0 μH (0.62 A).

D. Applications:

- Game Consoles
- Set Top Boxes
- Cables Modems
- Computers
- Mobile Communication Devices (Cell Phones, Radios, etc.)
- PDA, LCD, DVD, BRP, HD.

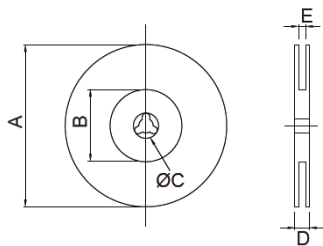
E. Characteristics Curve:



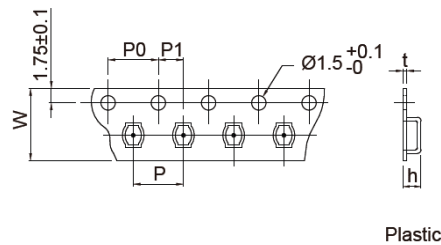
F. Supplementary Information:

1. Packaging Information

CARRIER TAPE REELS



TAPE DIMENSIONS (mm)



Series P/N	Reel dimensions (mm)					Tape dimensions (mm)						Parts per reel	Quantity per		
	A	B	C	D	E	W	P	P0	P1	h	t		7"	13"	Box
CSMS0412D	330	80	13	18.5	13.5	12	8	4	2	1.60	0.30	---	4,500	9,000	36,000

2. RoHS Reflow Solder Profile

Typical RoHS Reflow Profile

