

MRSC Series



MRSC series, metal alloy wire wound power inductor, its rated current could be increased up to 35% compare to ferrite base power inductor.

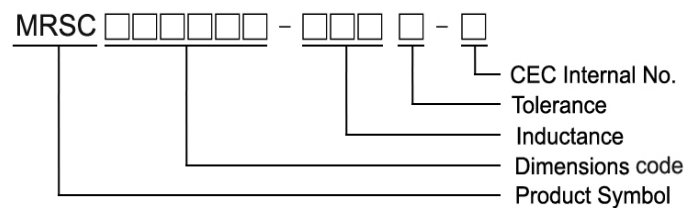
Features

- RoHS, Halogen Free and REACH Compliance
- Constructure Low RDC and high rated current.
- Wide inductance range
- Shielded and miniature package design

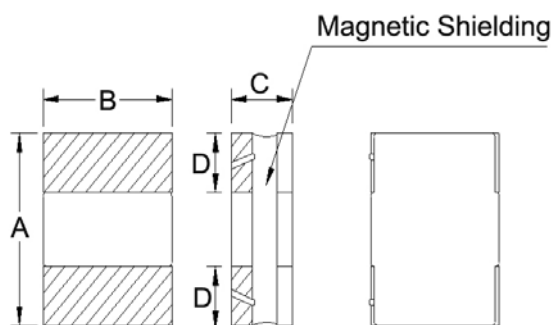
Applications

- Smartphones, tablets and wearable devices
- DSC, camcoders
- DC/DC converters

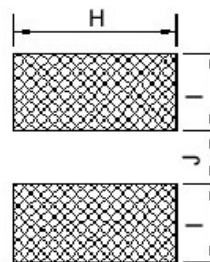
Product Identification



Shape and Dimensions



Recommended Pattern



Dimensions in mm

TYPE	A	B	C	D	H	I	J
MRSC252A10	2.5±0.25	2.0±0.25	1.0 Max	0.8	2.4	0.85	1.0

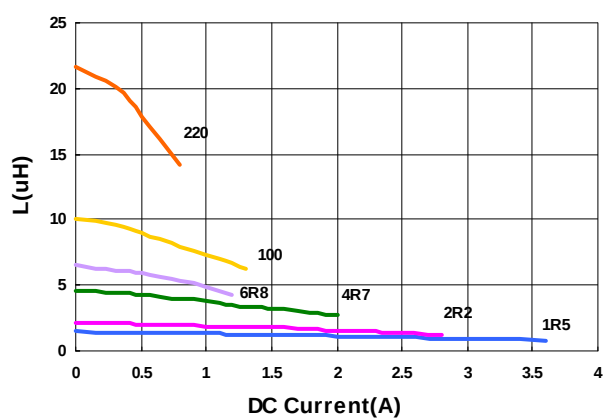
Electrical Characteristics

Part Number	Inductance (uH)	Test Frequency (MHz)	Tolerance (±%)	SRF (MHz)Typ	RDC(mΩ) Typ (Max)	Isat (A) Typ (Max)	Irms (A) Typ (Max)
MRSC252A10-1R5□-N	1.5	1	20, 30	65	85(110)	2.50(2.20)	2.20(1.90)
MRSC252A10-2R2□-N	2.2	1	20, 30	55	120(156)	2.10(1.80)	1.90(1.70)
MRSC252A10-4R7□-N	4.7	1	20, 30	36	250(325)	1.40(1.20)	1.20(1.00)
MRSC252A10-6R8□-N	6.8	1	20, 30	30	410(533)	1.10(1.00)	0.90(0.80)
MRSC252A10-100□-N	10	1	20, 30	25	650(845)	1.00(0.90)	0.64(0.57)
MRSC252A10-220□-N	22	1	20, 30	11	1300(1690)	0.72(0.64)	0.50(0.45)

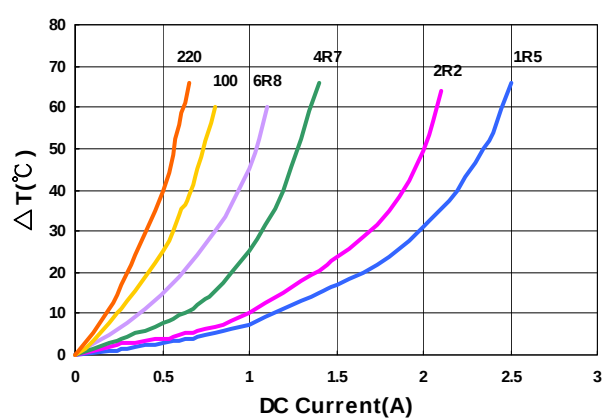
- When ordering, please specify tolerance and packaging codes
- Tolerance : T = ±30% , M = ±20%
- Packaging: Clear tape and reel {standard}
- L : Agilent/HP4285A+ Agilent/HP42841A, 1MHz 200mV
- RDC : Digital Milliohm Meter Chroma 16502, or equivalent
- Isat & I rms : Agilent/HP4285A+ Agilent/HP42841A, 1MHz 200mV
- Isat for Inductance drop 30% from its value without current
- I rms for a 40℃ rise above 25℃ ambient.
- Operating temperature range from -40℃ to 125℃. (Including self - temperature rise)

Test Instruments : HP4285A Material/Impedance Analyzer

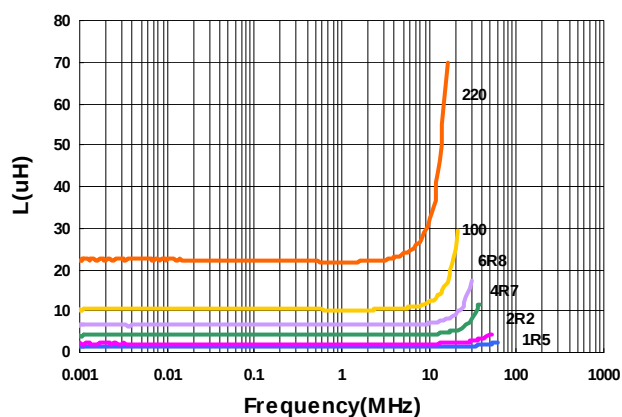
Inductance vs. DC Current



Temperature Change vs. DC Current



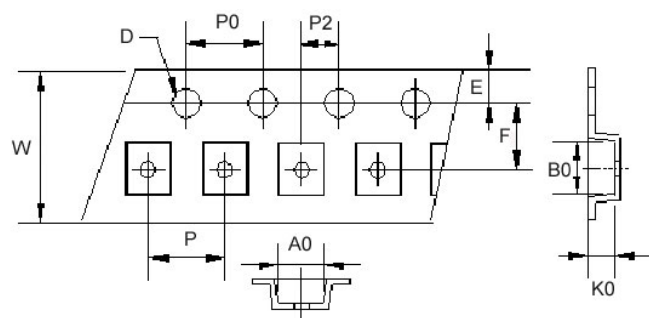
Inductance vs. Frequency



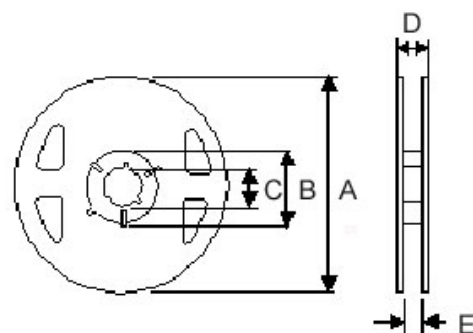
Sealed Power Inductors - MRSC Series

Packaging Specifications

Tape Dimensions



Reel Dimensions



Dimensions in mm

TYPE	Tape Dimensions										Reel Dimensions					Quantity PCS / Reel
	A0	B0	K0	D	E	F	W	P	P0	P2	A	B	C	D	E	
MRSC252A10	2.35	2.85	1.10	1.55	1.75	3.5	8.0	4	4	2	180	60	13	14.4	8.4	2000