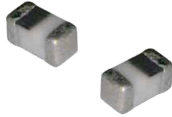


# MCI Series

## High Frequency Chip Inductor(Lead Free)

### Size 1005



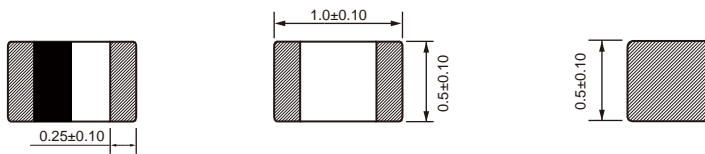
#### FEATURES

- Monolithic inorganic material construction.
- Closed magnetic circuit avoids crosstalk.
- Shapes and dimensions follow E.I.A. spec.
- Available in various sizes.
- Excellent solderability and heat resistance.
- High SRF up to 6GHz and above.
- Compliant with RoHS legislation and also support lead-free soldering.
- Quantity: 10000pcs

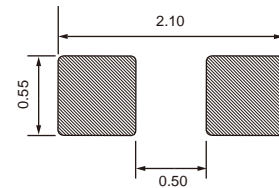
#### APPLICATION

- High frequency circuits
- Bluetooth
- Wireless LAN
- Filter circuits
- Oscillators

Dimensions: [mm]



Land Pattern: [mm]



Electrical Properties:

Part No	Inductance @100MHz (nH)	Tolerance	Q@100MHz		Temperature Rise Current Max. (mA)	DCR Max. (Ω)	SRF Min. (MHz)
			Normal Value	Min.			
MCI1005-1N0S	1.0	±0.3 nH	11	8	300	0.09	10000
MCI1005-1N2S	1.2	±0.3 nH	11	8	300	0.09	10000
MCI1005-1N5S	1.5	±0.3 nH	11	8	300	0.12	6000
MCI1005-1N8S	1.8	±0.3 nH	11	8	300	0.12	6000
MCI1005-2N2S	2.2	±0.3 nH	10	8	300	0.14	6000
MCI1005-2N7S	2.7	±0.3 nH	10	8	300	0.14	6000
MCI1005-3N3J	3.3	±5%	10	8	300	0.16	6000
MCI1005-3N9J	3.9	±5%	10	8	300	0.19	4000
MCI1005-4N7J	4.7	±5%	10	8	300	0.21	4000
MCI1005-5N6J	5.6	±5%	10	8	300	0.23	4000
MCI1005-6N8J	6.8	±5%	10	8	300	0.25	3900
MCI1005-8N2J	8.2	±5%	10	8	300	0.28	3600
MCI1005-10NJ	10	±5%	10	8	300	0.31	3200
MCI1005-12NJ	12	±5%	11	8	300	0.40	2700
MCI1005-15NJ	15	±5%	11	8	300	0.50	2300
MCI1005-18NJ	18	±5%	11	8	300	0.55	2100

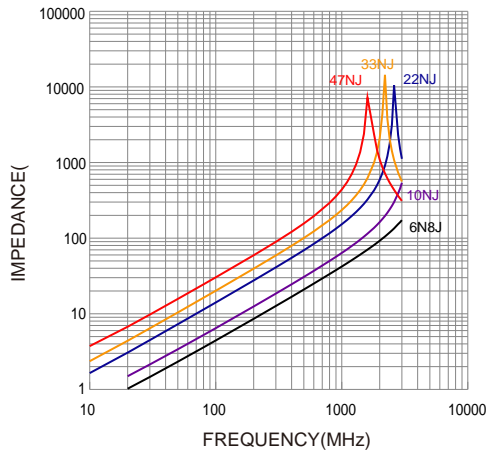
Part No	Inductance @100MHz (nH)	Tolerance	Q@100MHz		Temperature Rise Current Max. (mA)	DCR Max. ( $\Omega$ )	SRF Min. (MHz)
			Normal Value	Min.			
MCI1005-22NJ	22	$\pm 5\%$	11	8	300	0.60	1900
MCI1005-27NJ	27	$\pm 5\%$	11	8	300	0.70	1600
MCI1005-33NJ	33	$\pm 5\%$	11	8	300	0.80	1300
MCI1005-39NJ	39	$\pm 5\%$	11	8	200	1.00	1200
MCI1005-47NJ	47	$\pm 5\%$	11	8	200	1.20	1000
MCI1005-56NJ	56	$\pm 5\%$	11	8	200	1.30	750
MCI1005-68NJ	68	$\pm 5\%$	11	8	180	2.00	750

Operating Temperature:  $-40 \sim +85^\circ\text{C}$

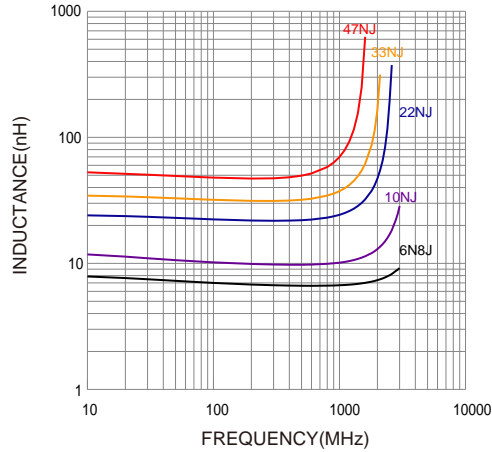
Temperature rise current: the actual value of DC current when the temperature rise is  $T_{30C}$  max.

## Typical Electrical Characteristics:

Impedance VS. Frequency Characteristics:



Inductance VS. Frequency Characteristics:



Q VS. Frequency Characteristics:

