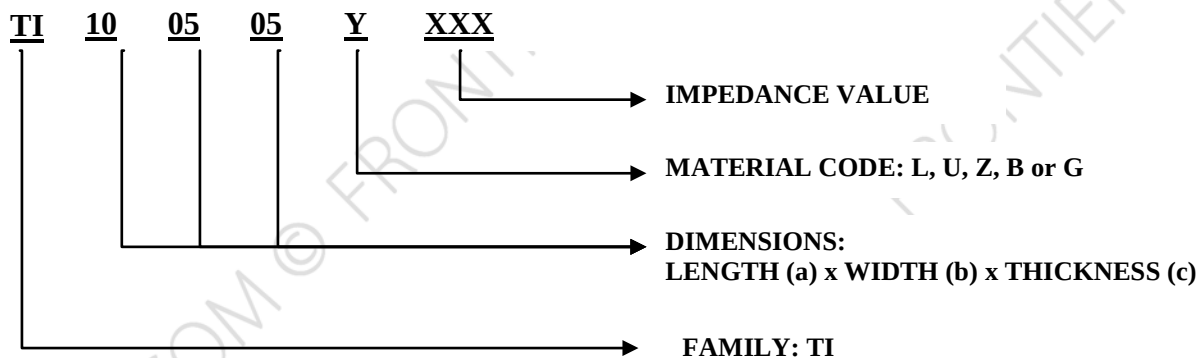


A. Electrical Specifications:

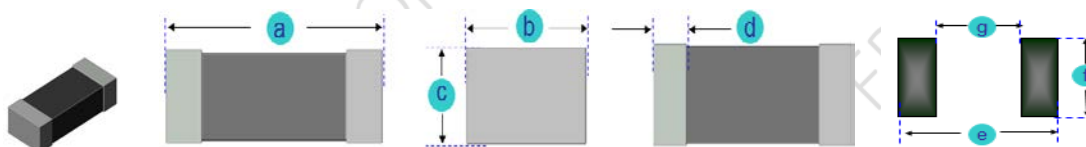
P/N	Impedance (Ω) $\pm 25\%$ @100MHz	DCR Max. (Ω)	I rms. Max. (A)
TI100505U100	10	0.030	2.0
TI100505U300	30	0.050	2.0
TI100505U600	60	0.200	1.0
TI100505U121	120	0.200	1.2
TI100505Z121	120	0.090	1.5

B. Part Number Key:



C. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g
TI100505 (0402)	1.0 (0.039)	0.5 (0.020)	0.5 (0.020)	0.1 (0.004)	2.20 (0.087)	0.70 (0.028)	0.40 (0.016)
Tol.	± 0.1 (0.004)	± 0.1 (0.004)	± 0.1 (0.004)	Min.	Typ.	Typ.	Typ.



D. Materials:

ITEM	UNIT	Material Code				
		L	B	G	U	Z
Initial Permeability (μ_{iac}):	----	25	45	110	200	500
Maximum Permeability (μ_m):	----	125	125	250	450	900
Saturation Flux Density at 10 Oe:	Gauss	2000	2000	1700	1400	1500
Curie Temperature(T_c):	$^{\circ}\text{C}$	>200	>200	>130	>100	>130
Volume Resistivity (ρ):	$\Omega\text{-m}$	100000	100000	100000	100000	100000
Temperature Coefficient:	1/10000 $^{\circ}\text{C}$	10	10	13	5	12
Density:	g/cm ³	4.8	4.8	4.8	4.8	4.8

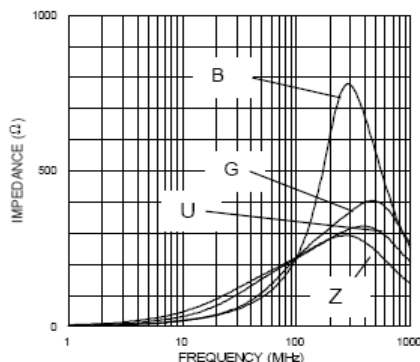
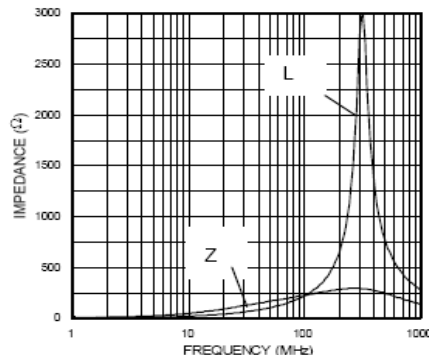


TI100505 (0402) Series SMD MULTILAYER FERRITE CHIP BEADS (HIGH CURRENT)

Rev. A

E. Impedance Characteristics of Materials:

- Z Material is for applications whose blocking regions are near 100 MHz.
- L Material, an improvement of B Material has sharp impedance characteristic at high frequency.
- G Material is for application whose signal frequency is far from the cut off region. Suitable for application requires low insertion loss at high frequency.
- Different materials are available for different application range.
- With one material, higher impedance has sharper characteristics.
- Please confirm the signal wave form to choose suitable products.



F. General Information:

- TI100505-yxxx, "TI" = Type, "10" = Length, "05" = Width, "05" = Thickness, "y" = Material, "xxx" = Impedance.
- Tolerance: $\pm 25\%$
- Small and lightweight surface mounting type
- High-density packaging with a pitch of 2.54 mm (0.1 inch) max. is possible. This series requires less space and have greater EMI suppression effects.
- Excellent in physical properties, such as terminal strength, flexure strength, soldering resistance and solder-ability.
- Applicable to both flow and IR reflow soldering.
- High impedance covers wide frequency ranges.
- TI series can be used in high current circuits due to its low DC resistance.
- Operating temperature: -40°C to $+125^{\circ}\text{C}$
- Impedance and Current range: From $10\ \Omega$ (2000 mA) to $120\ \Omega$ (1200 mA)
- Unspecified values available on request.
- MSL: Level 1.

G. Applications:

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