



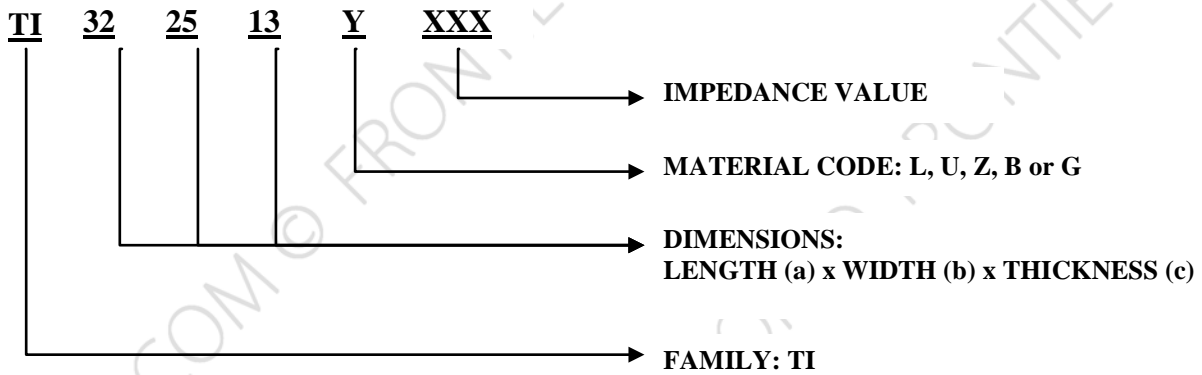
TI322513 (1206) Series
SMD MULTILAYER FERRITE CHIP BEADS (HIGH CURRENT)

Rev. A

A. Electrical Specifications:

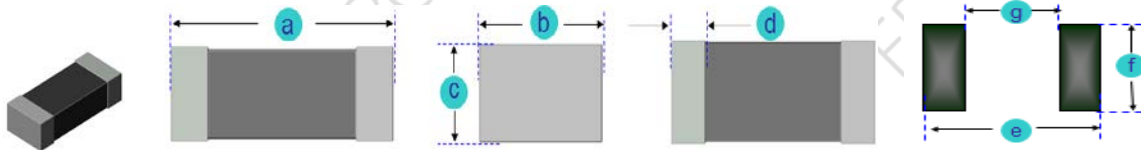
P/N	Impedance (Ω) $\pm 25\%$ @100MHz	DCR Max. (Ω)	I rms. Max. (A)
TI322513U300	30	0.050	3.0
TI322513U520	52	0.050	3.0
TI322513U600	60	0.030	4.0
TI322513U650	65	0.030	3.5
TI322513U151	150	0.020	5.0

B. Part Number Key:



C. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g
TI322513 (1206)	3.2 (0.126)	2.5 (0.098)	1.3 (0.051)	0.5 (0.020)	4.40 (0.173)	2.70 (0.106)	1.20 (0.047)
Tol.	± 0.2 (0.008)	± 0.2 (0.008)	± 0.2 (0.008)	± 0.3 (0.012)	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

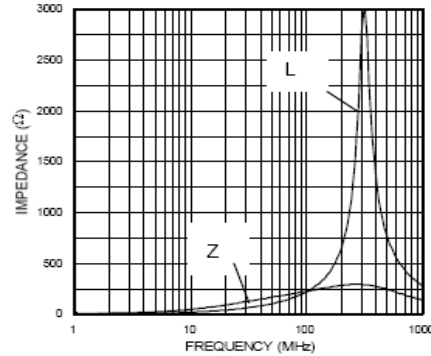
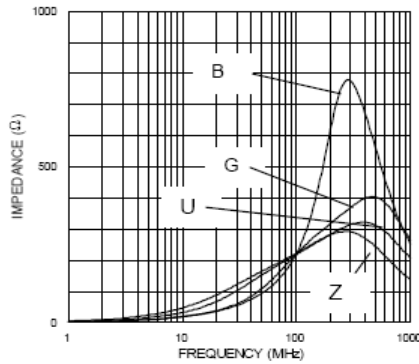


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E. Impedance Characteristics of Materials:

- 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:

- TI322513-yxxx, “TI” = Type, “32” = Length, “25” = Width, “13” = 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 $30\ \Omega$ (3000 mA) to $150\ \Omega$ (5000 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.)