



TI160808 (0603) Series **SMD MULTILAYER FERRITE CHIP BEADS (HIGH CURRENT)**

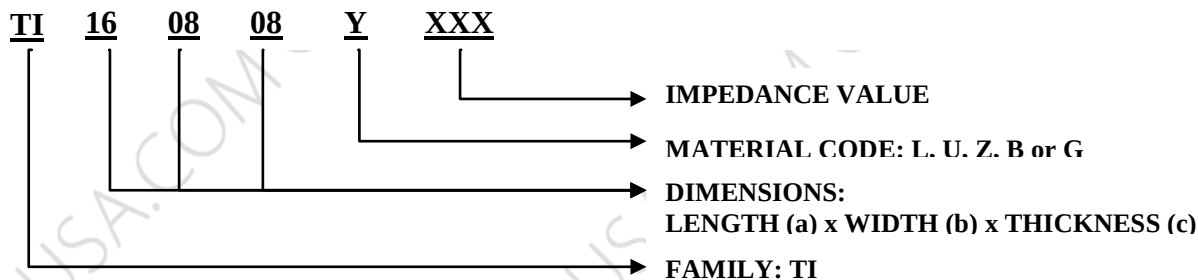
Rev. A

A. Electrical Specifications:

P/N	Impedance (Ω) $\pm 25\%$ @100MHz	DCR Max.(Ω)	I rms. Max. (A)
TI160808B050	5	0.100	1.0
TI160808B300	30	0.150	1.0
TI160808B101	100	0.200	1.0
TI160808G100	10	0.060	2.0
TI160808G600	60	0.100	2.0
TI160808G101	100	0.100	2.0
TI160808G301	300	0.200	2.0
TI160808G601	600	0.300	1.0
TI160808U100	10	0.010	5.0
TI160808U110	11	0.030	4.0
TI160808U190	19	0.030	3.0
TI160808U200	20	0.030	3.0
TI160808U220	22	0.030	3.0
TI160808U250	25	0.030	3.0
TI160808U270	27	0.030	4.0
TI160808U280	28	0.030	4.0
TI160808U300	30	0.030	4.0
TI160808U400	40	0.050	3.0
TI160808U470	47	0.050	3.0
TI160808U600	60	0.060	3.0
TI160808U680	68	0.060	3.0
TI160808U800	80	0.060	3.0
TI160808U101	100	0.080	2.5
TI160808U121	120	0.080	2.5
TI160808U151	150	0.080	2.5
TI160808U181	180	0.120	2.0
TI160808U221	220	0.150	2.0
TI160808U301	300	0.150	2.0
TI160808U471	470	0.200	1.0
TI160808U601	600	0.200	1.0
TI160808Z220	22	0.030	3.0
TI160808Z300	30	0.030	3.0
TI160808Z500	50	0.060	3.0
TI160808Z800	80	0.060	2.5
TI160808Z121	120	0.080	2.5
TI160808Z151	150	0.080	2.5
TI160808Z221	220	0.150	2.0
TI160808Z301	300	0.150	2.0
TI160808Z471	470	0.200	1.0
TI160808Z601	600	0.200	1.0

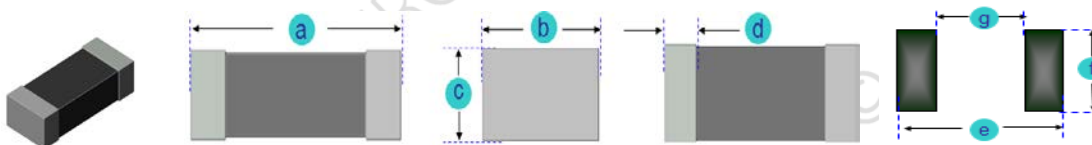
Note: TI160808yxxx, "TI" = Type, "16" = Length, "08" = Width, "08" = Thickness, "y" = Material, "xxx" = Impedance.

B. Part Number Key:



C. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g
TI160808(0603)	1.6 (0.063)	0.8 (0.031)	0.8 (0.031)	0.5 (0.020)	2.80 (0.110)	1.00 (0.039)	0.60 (0.024)
Tol.	± 0.2 (0.008)	± 0.2 (0.008)	± 0.1 (0.004)	± 0.3 (0.012)	Typ.	Typ.	Typ.





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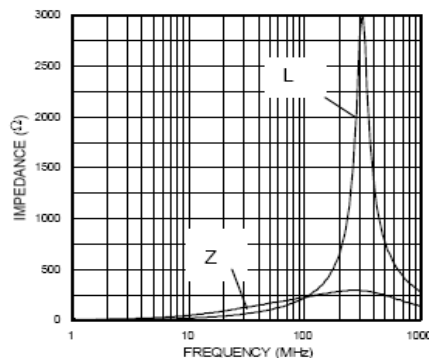
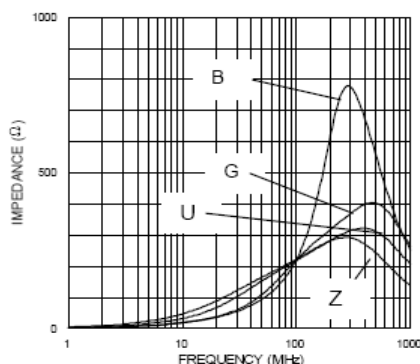
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D. Materials:

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):	°C	>200	>200	>130	>100	>130
Volume Resistivity (ρ):	Ω -m	100000	100000	100000	100000	100000
Temperature Coefficient:	1/10000°C	10	10	13	5	12
Density:	g/cm ³	4.8	4.8	4.8	4.8	4.8

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:

- TI160808-yxxx, “TI” = Type, “16” = Length, “08” = Width, “08” = 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 $5\ \Omega$ (1000 mA) to $600\ \Omega$ (1000 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.)