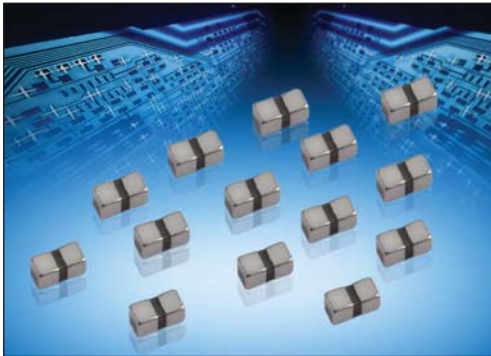


GX Series



Ultra Broad Band Capacitor



ADVANTAGES

- Ultra-Broadband performance
- Ultra-Low Insertion Loss
- X5R & X7S Characteristics
- Excellent Return Loss

APPLICATIONS

- Semi-Conductor Data Communications Customers
- Receiver Optical Sub-Assemblies
- Transimpedance Amplifier Customers
- Test Equipment Manufactures

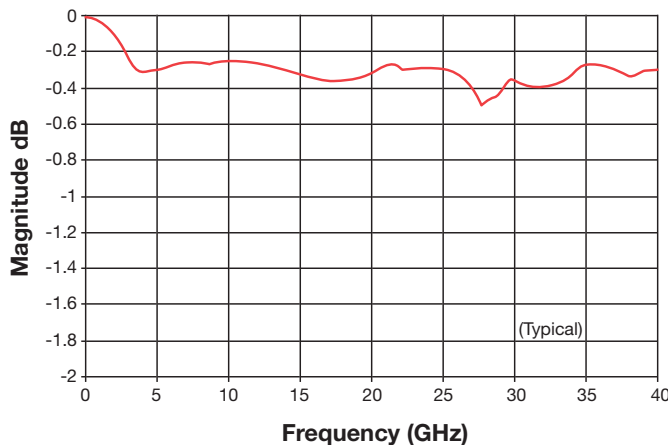
The GX Series was developed specifically to address DC Blocking issues from ~16KHz (-3dB roll-off) to 40GHz. Most applications will experience resonance-free insertion loss of <0.5dB thru at least 40GHz. Insertion loss at higher frequencies is in part dependent on installation parameters. Using AVX's patented precision thin film termination process, the part is designed to be completely orientation insensitive with a standard EIA 0402 footprint to minimize board space requirements. Both

Ni/Sn and Ni/Au terminations are available to cover a wide range of attachment processes. All GX parts are RoHS compliant.

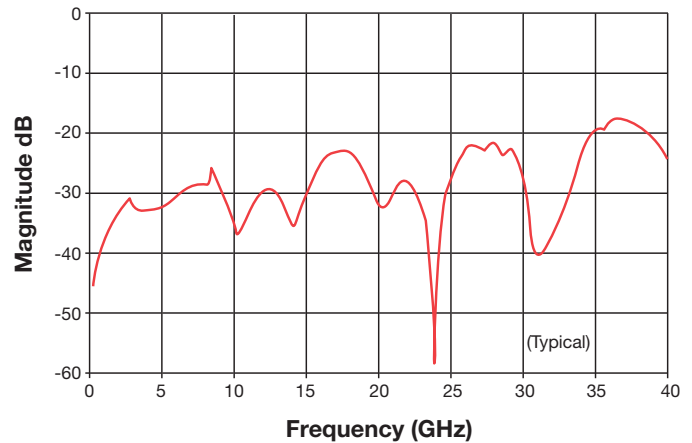
Au terminated units are wire bondable. Users may, therefore, find these devices equally useful in bypass applications when wire bonding is a necessary part of the manufacturing process.

More information can be obtained by contacting the factory or your local AVX representative.

GX02 Series – Insertion Loss (S21)



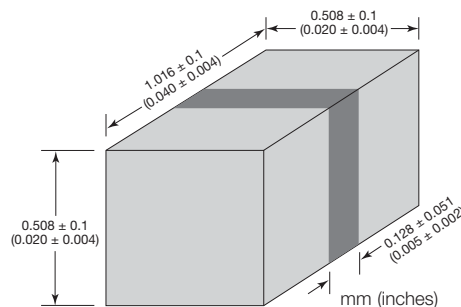
GX02 Series – Return Loss (S11)



Test Parameters:

Rogers RO4350 Board (T = 10 mils); Trace width = 22 mils; Gap = 24 mils; 50 ohm (nominal) characteristic impedance

MECHANICAL SPECIFICATIONS



GX Series



Ultra Broad Band Capacitor

ELECTRICAL SPECIFICATIONS

Capacitance	0.1 $\mu\text{F} \pm 10\%$
Voltage Rating/Operating Temperature	16 VDC @ 85°C; 10 VDC @ 125°C
Dielectric Withstanding Voltage	250% WVDC
Insulation Resistance	10,000 Meg Ohms @ 25°C; 1,000 Meg Ohms @ 125°C
Temperature Coefficient	16 VDC X5R ($\pm 15\%$); 10 VDC X7S ($\pm 22\%$)

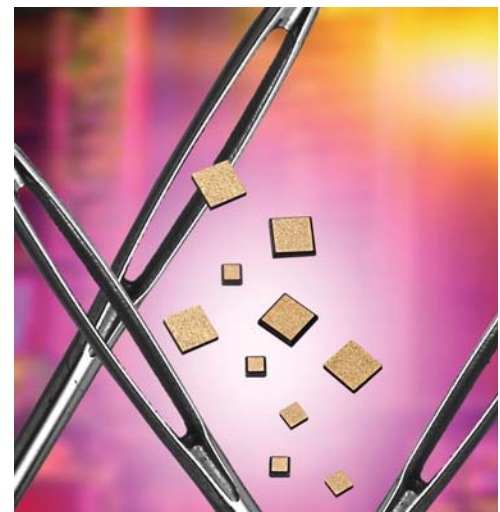
HOW TO ORDER

GX	02	YD	104	K	A	T	2
Style	Case Size 02 = 0402	Voltage/Dielectric YD = 16Vdc/X5R 10Vdc/X7S	Capacitance 104 = 0.1 μF EIA Cap Code in pF	Tolerance K = $\pm 10\%$	Failure Rate A = Std	Termination T = Ni-Sn (Standard) 7 = Ni-Au	Packaging 2 = 4000 pcs, 7" T&R 2-500 = 500 pcs, 7" T&R 2-1000 = 1000 pcs, 7" T&R

ADDITIONAL MICROWAVE PRODUCTS

AVX also manufactures a broad range of SLC (Single Layer Ceramic) products utilizing high k GBL dielectrics especially suitable for space constrained broadband bypass/decoupling applications. A variety of voltage ratings are available and all dielectrics are suitable for operation from -55°C to +125°C. All SLC products are RoHS compliant.

Style	GH/GB01/06	GH/GB01/06	GH/GB01/06	GH10-55	
Dielectric	Z	Maxi	Maxi+	Ultra Maxi	
k	2.5K-18K	20K	30K	60K	
TC	X7S	X7R	X7R	X7R	
Cap Range	20-4700pF	68-8200pF	330-10000pF	200-6500pF	
Rating	50/100VDC	50VDC	50VDC	25VDC	
Nom	mm sq	0.38 / 2.28	0.38 / 2.28	0.38 / 2.28	0.25 / 1.40
Sizes	inches sq	0.015 / 0.090	0.015 / 0.090	0.015 / 0.090	0.010 / 0.055



NOTICE: Specifications are subject to change without notice. Contact your nearest AVX Sales Office for the latest specifications. All statements, information and data given herein are believed to be accurate and reliable, but are presented without guarantee, warranty, or responsibility of any kind, expressed or implied. Statements or suggestions concerning possible use of our products are made without representation or warranty that any such use is free of patent infringement and are not recommendations to infringe any patent. The user should not assume that all safety measures are indicated or that other measures may not be required. Specifications are typical and may not apply to all applications.

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