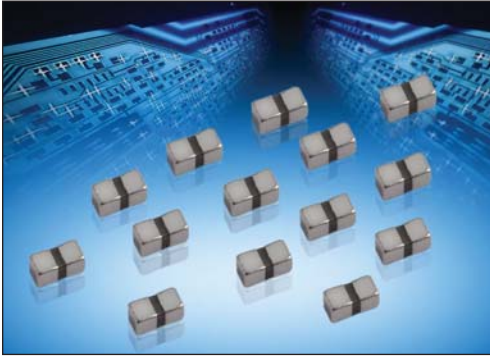


GX02 Series

Ultra-Broadband 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 Manufacturers

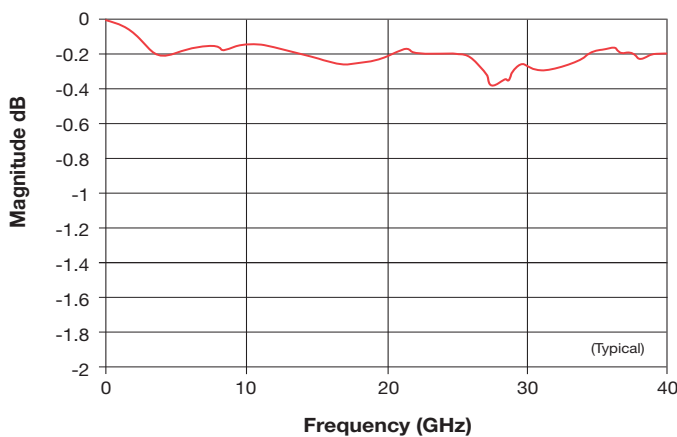
The GX Series was developed specifically to address DC blocking issues from ~16KHz (-3dB roll-off) to 40GHz. Most applications will experience resonance-free insertion loss of <0.5dB thru at least 40GHz. Insertion loss at higher frequencies is in part dependent on installation parameters. Using AVX's 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.

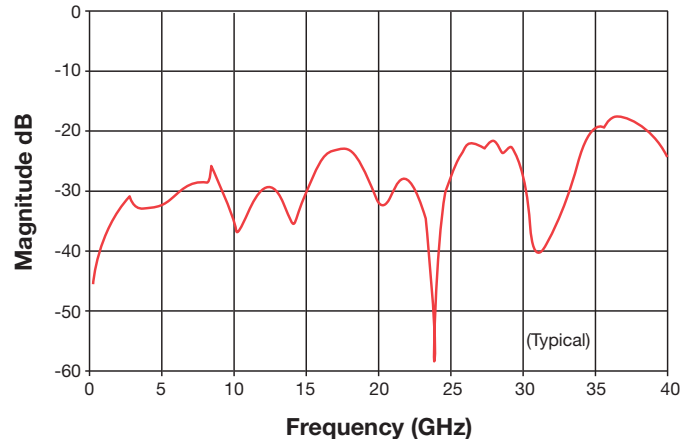
Au terminated units are wire bondable. Users may, therefore, find these devices useful in bypass applications when wire bonding is a necessary part of the manufacturing process.

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

GX02 Series – Insertion Loss (S21)



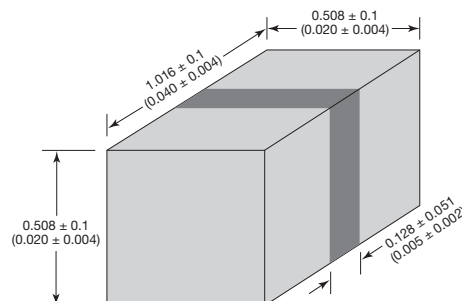
GX02 Series – Return Loss (S11)



Test Parameters:

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

MECHANICAL SPECIFICATIONS



GX02 Series



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

