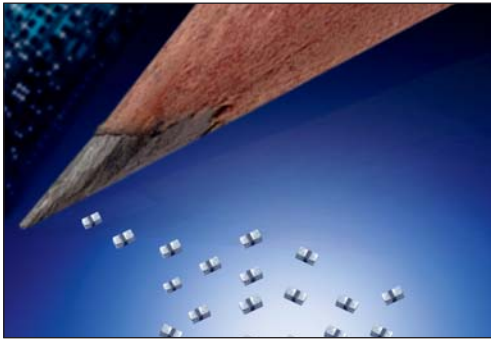


# GX01 Series



## 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

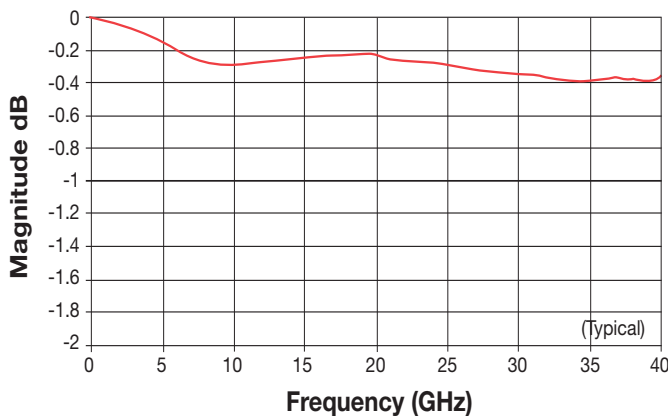
The GX Series was developed specifically to address DC blocking issues from 160KHz (-3dB roll-off) to 40GHz. Most applications will experience resonance-free insertion loss of <0.4dB thru at least 40GHz. Insertion loss at higher frequencies is in part dependent on installation parameters. Using AVX's patented precision thin film termination process, the part is designed to be completely orientation insensitive with a standard EIA 0201 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.

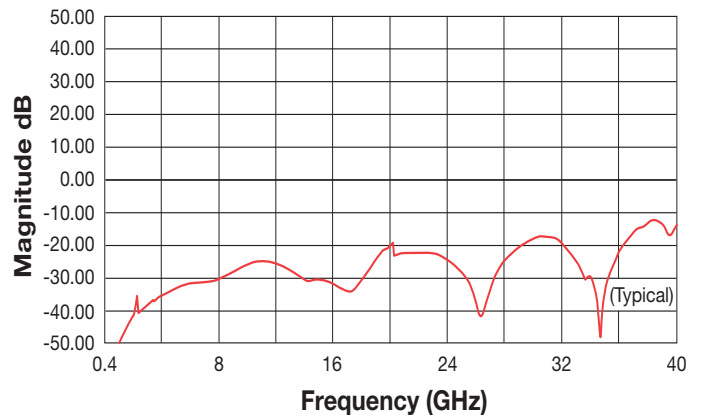
Au terminated units are wire bondable. Users may, therefore, find these devices useful in bypass applications when wire bonding is a necessary part of the manufacturing process.

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

**GX01 Series – Insertion Loss (S21)**



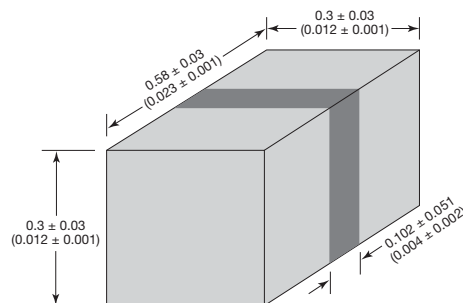
**GX01 Series – Return Loss (S11)**



### Test Parameters:

All testing done on 10-mil thick Rogers R03006 Microstrip board, with device under test subtending a 10 mil gap in a 13.4 mil wide center trace (nominal 50 Ohm characteristic impedance)

### MECHANICAL SPECIFICATIONS



# GX01 Series



## Ultra-Broadband Capacitor

### ELECTRICAL SPECIFICATIONS

Capacitance	0.01 $\mu$ F +100% - 0%
Voltage Rating/Operating Temperature	10 VDC @ 85°C; 6.3 VDC @ 125°C
Dielectric Withstanding Voltage	250% WVDC
Insulation Resistance	10,000 Meg Ohms @ 25°C; 1,000 Meg Ohms @ 125°C
Temperature Coefficient	10 VDC X5R ( $\pm$ 15%); 6.3 VDC X7S ( $\pm$ 22%)

### HOW TO ORDER

<b>GX</b>   <b>Style</b>	<b>01</b>   <b>Case Size</b> 01 = 0201	<b>ZD</b>   <b>Voltage/Dielectric</b> ZD = 10VDC/X5R 6.3Vdc/X7S	<b>103</b>   <b>Capacitance</b> 103 = 0.01 $\mu$ F EIA Cap Code in pF	<b>P</b>   <b>Tolerance</b> P = +100% -0%	<b>A</b>   <b>Failure Rate</b> A = Std	<b>T</b>   <b>Termination</b> T = Ni-Sn (Standard) 7 = Ni-Au	<b>D</b>   <b>Packaging</b> D = 4000 pcs 3" T&R D-500 = 500 pcs 3" T&R D-1000 = 1000 pcs 3" T&R
--------------------------------	-------------------------------------------------	-----------------------------------------------------------------------------	--------------------------------------------------------------------------------------	-------------------------------------------------------	-------------------------------------------------	-----------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------

