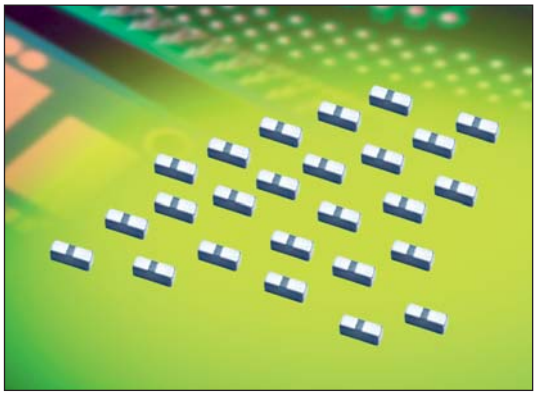
GX0S Series

Ultra Broad Band Capacitor



ADVANTAGES

- Ultra-Broadband performance
- Ultra-Low Insertion Loss
- Excellent Return Loss

APPLICATIONS

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

The GX0S Series was developed to address DC Blocking issues from ~16KHz (-3dB roll-off) to 40GHz and was designed specifically for mounting on strip lines with widths less than 20mils. In most applications, insertion loss (as shown below) will typically fall in the range of 0.4dB. Insertion loss at frequencies higher than 40GHz will be in part dependent on installation parameters. These devices utilize AVX's patented precision thin film termination process and are especially well suited for high volume solder assembly.

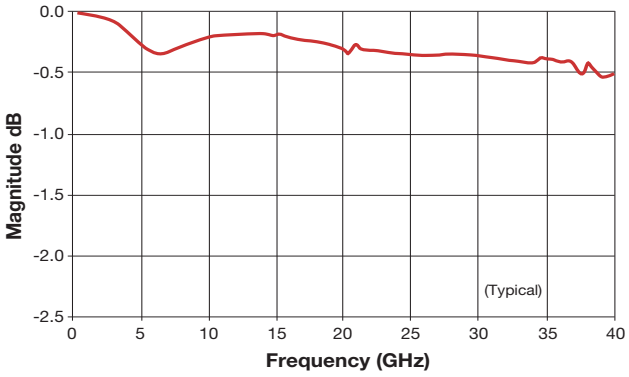
Both Ni/Sn and Ni/Au terminations are available to cover a wide range of attachment processes.

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

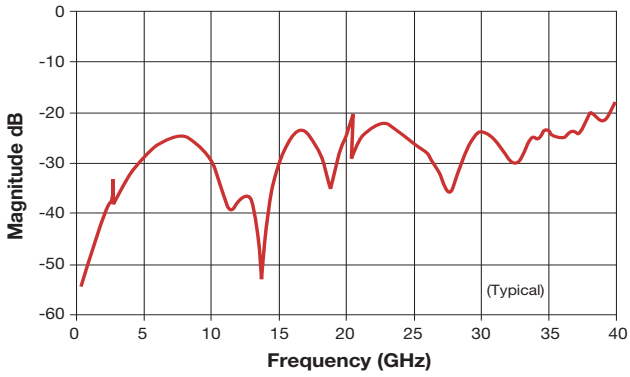
GX0S products (like all GX Series parts) are RoHS compliant.

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

GX0S Series – Insertion Loss (S21)



GX0S 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

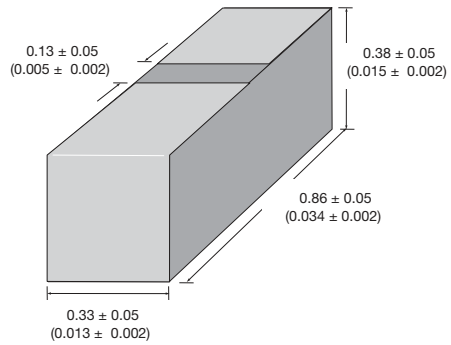
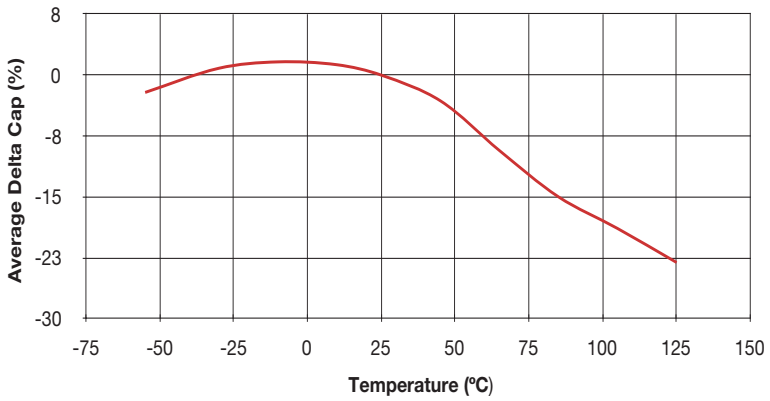


Figure 1



GX0S Series

Ultra Broad Band Capacitor

ELECTRICAL SPECIFICATIONS

Capacitance	0.1 uF ±20%
Voltage Rating/Operating Temperature	6.3 VDC @ 85ºC, 4 VDC @ 125ºC
Dielectric Withstanding Voltage	250% WVDC
Insulation Resistance	10,000 Meg Ohms @ 25ºC, 1,000 Meg Ohms @ 125ºC
Temperature Coefficient	6.3 VDC (X5R), 4 VDC - See Figure 1

HOW TO ORDER

GX	0S	6D	104	M	A	T	D
Style	**Case Size** Special	**Voltage/Dielectric** 6D = 6.3VDC/X5R 4.0VDC/125ºC (See Fig. 1)	**Capacitance** 104 = 0.1uF EIA Cap Code in pF	**Tolerance** M = ±20%	**Failure Rate** A = Std	**Termination** T = Ni-Sn (Standard) 7 = Ni-Au	**Packaging** D = 4000 pcs, 3" T&R D-500 = 500 pcs, 3" T&R D-1000 = 1000 pcs, 3" T&R

RoHS COMPLIANT