

GF Series



Broadband Multilayer Ceramic Capacitors



The GF series of broadband multilayer ceramic capacitors was developed for DC blocking from 16kHz to 20GHz. GF series capacitors provide low insertion loss to 20GHz and are available in an 0201 package with 100nF of capacitance. These capacitors are ideal for DC blocking, coupling, bypassing and feedback applications in optical transceiver modules, high speed applications and instrumentation.

FEATURES

- Operating Frequency Range: 16 KHz to 20 GHz
- Insertion Loss: 0.5dB (typ)
- X5R Dielectric
- Operating Temperature Range: -55°C to +85°C
- Orientation Insensitive
- Broadband Performance
- Low Insertion Loss
- Excellent Return Loss
- Rugged Ceramic Construction
- RoHS Compliant

APPLICATIONS

- High Speed Data Communications
- Optical sub-assemblies
- Transimpedance Amplifiers
- Test Equipment

HOW TO ORDER

| | | | | | | | | |
|---------------------|-------------|----------------------|-------------------|--------------------|------------------|---------------------|-------------------------------|--|
| GF | 01 | Z | D | 104 | K | A | T | D |
| Series | Size | Rated Voltage | Dielectric | Capacitance | Tolerance | Failure Rate | Termination | Packaging |
| Broadband Capacitor | 01 = 0201 | Z = 10Vdc | D = X5R | 104 = 100nF | K = ±10% | A = Std. | T = Sn Plated over Ni Barrier | D = 4000 pcs 3" T&R D-500 = 500 pcs 3" T&R D-1000 = 1000 pcs 3" T&R |

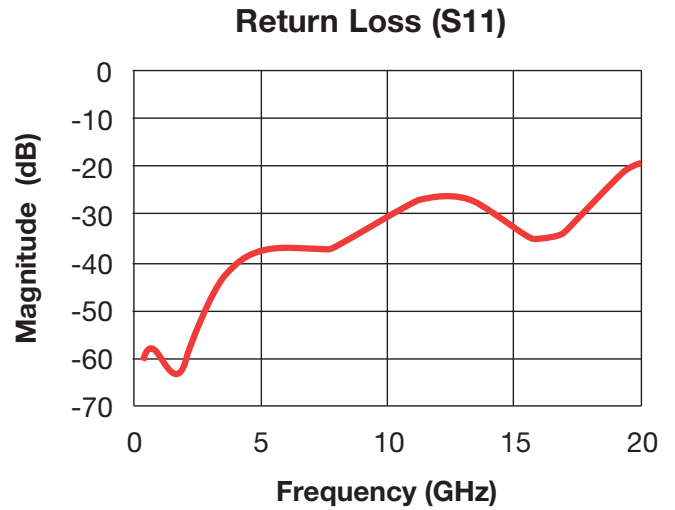
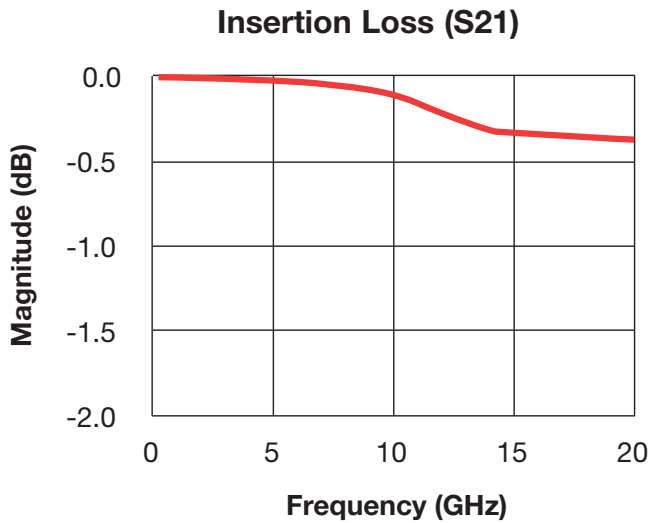


ELECTRICAL SPECIFICATIONS

| | |
|--|--|
| AVX PN | GF01ZD104KATD |
| Capacitance | 100 nF |
| Rated DC Voltage | 10V |
| Dielectric Withstanding Voltage | 250% of rated voltage for 5 seconds |
| Operating Temperature Range | -55°C to +85°C |
| Temperature Coefficient of Capacitance | ±15% (-55°C to +85°C) |
| Maximum DF | 5% @ 1KHz |
| Insulation Resistance | 108Ω min. @ +25°C @ rated voltage 107Ω min. @ +85°C @ rated voltage |



ELECTRICAL PERFORMANCE



Test Parameters:

All testing performed on 10-mil-thick Rogers RO4350 microstrip board, with UUT subtending a 24 mil gap in a 22-mil-wide center trace (nominal 50Ω characteristic impedance). Measurements were made using an Anritsue 3680K Universal Test Fixture and an HP8722D Vector Network Analyzer having a four-receiver architecture. Measurements have been de-embedded to the edges of the UUT using a standard TRL calibration procedure.

MECHANICAL SPECIFICATIONS

inches (mm)

