

# RF Attenuator

## Low Insertion Loss

# Model TG9006

## 5 to 1600 MHz

### Features

- 5 MHz to 1600 MHz
- Low Insertion Loss
- Operating Temp. - 55 °C to + 85 °C
- Environmental Screening Available

### Specifications

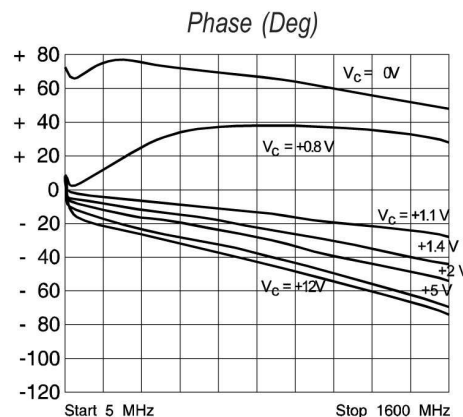
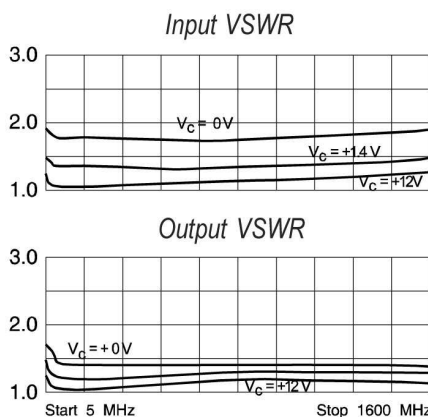
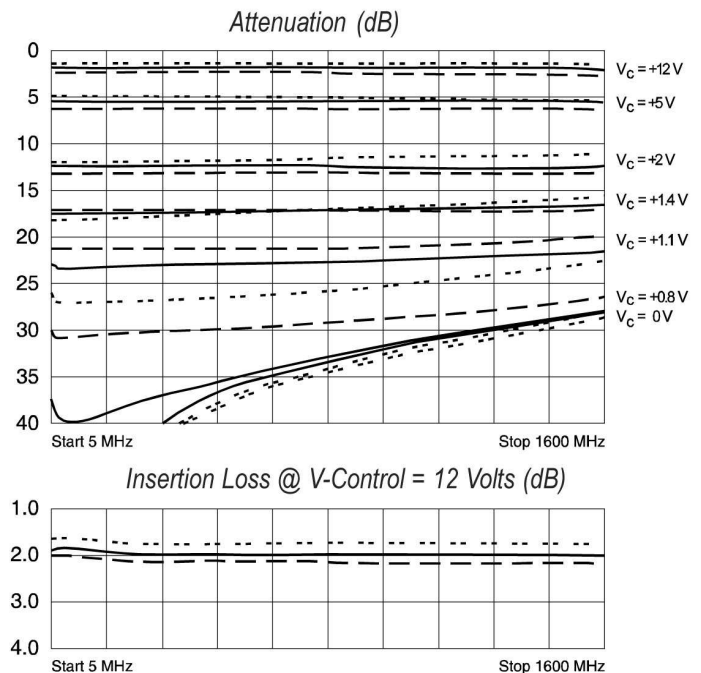
| CHARACTERISTIC         | TYPICAL<br>Ta= 25 °C | MIN/MAX<br>Ta = -55 °C to +85 °C |
|------------------------|----------------------|----------------------------------|
| Frequency (MHz)        | 5 - 1600 MHz         | 5 - 1600 MHz                     |
| Insertion Loss (Vc=15) |                      |                                  |
| 5-500 MHz              | 2.0                  | 2.3 Max.                         |
| 5-1000 MHz (dB)        | 2.2                  | 2.5 Max.                         |
| 5-2000 MHz             | 2.5                  | 3.5 Max.                         |
| Max Attenuation        |                      |                                  |
| 5-500 MHz              | 33                   | 31 Min.                          |
| 5-1000 MHz (dB)        | 27                   | 25 Min.                          |
| 5-2000 MHz             | 23                   | 18 Min.                          |
| VSWR (Worst Case)      |                      |                                  |
| 5-500 MHz              | 1.75:1               | 2.0:1 Max.                       |
| 5-1000 MHz (dB)        | 1.75:1               | 2.0:1 Max.                       |
| 5-2000 MHz             | 2.2:1                | 2.5:1 Max.                       |
| Flatness over Freq.    |                      |                                  |
| 5-500 MHz              | ±0.15                | ±0.25 Max.                       |
| 5-1000 MHz (dB)        | ±0.5                 | ±1.0 Max.                        |
| 5-2000 MHz             | ±0.7                 | ±1.5 Max.                        |
| Bias Power             | Vdc                  |                                  |
|                        | mA                   |                                  |
|                        | +12                  | +12                              |
|                        | 5.5                  | 10 Max.                          |
| Control Power          | Vdc                  |                                  |
|                        | mA                   |                                  |
|                        | 0 to +12             | 0 to +12                         |
|                        | 6.5                  | 0 to 7 Max.                      |
| Switching Speed (µsec) | 40                   | 60 Max.                          |

Note: Care should always be taken to effectively ground the case of each unit.

### Maximum Ratings

Ambient Operating Temperature ..... -55°C to + 100 °C  
 Storage Temperature ..... -62°C to + 125 °C  
 Case Temperature ..... + 125 °C  
 DC Voltage ..... + 18 Volts  
 Continuous RF Input Power ..... + 20 dBm  
 Short Term RF Input Power ..... 200 Milliwatts  
 ..... (1 Minute Max.)  
 Maximum Peak Power..... 1 Watt  
 ..... (3 µsec Max.)

### Typical Performance Data



### Packaging Options (see Appendix)

TG9006, 5 Pin TO-8 (T5)  
 TNG9006, 4 Pin Surface Mount (SM3)  
 BXG9006, Connectorized Housing (H6)

Legend ——— + 25 °C - - - - + 85 °C - - - - -55 °C