

Reflective Voltage Control Attenuator 2-18GHz

Features

- Wide Band Operation 2-18GHz
- Wide Attenuation Range 30dB
- Reflective Topology
- Single Control Operation
- Customization available upon request



| Parameters | Min | Typ. | Max | Units |
|--|----------------------------------|-------|-----|----------|
| Frequency Range | 2 | | 18 | GHz |
| Attenuation Range | | 30 | | dB |
| Insertion Loss | | 1.3 | 1.8 | dB |
| Insertion Loss Temperature Coefficient | | 0.003 | | dB/ °C |
| Input VSWR | | 1.5 | 1.8 | : 1 |
| Output VSWR | | 1.5 | 1.8 | : 1 |
| 0.1dB Compression Point P0.1dB | | 30 | | dBm |
| Input Ip3 | | 43 | | dBm |
| Switching Speed | | | 2.5 | us |
| Control Voltage | 0 | 10 | | V |
| Weight | | 0.35 | | ounces |
| Impedance | | 50 | | Ω |
| Bias Current | | 15 | | mA |
| Input / Output Connectors | SMA - Female | | | |
| Finish | Gold plated | | | |
| Material | copper | | | |
| Sealing | Hermetically Sealed (Optional) | | | |



Absolute Maximum Ratings

| | |
|-----------------|---------|
| Control Voltage | 0 ~ 15V |
| RF Input power | +30dBm |

Ordering Information

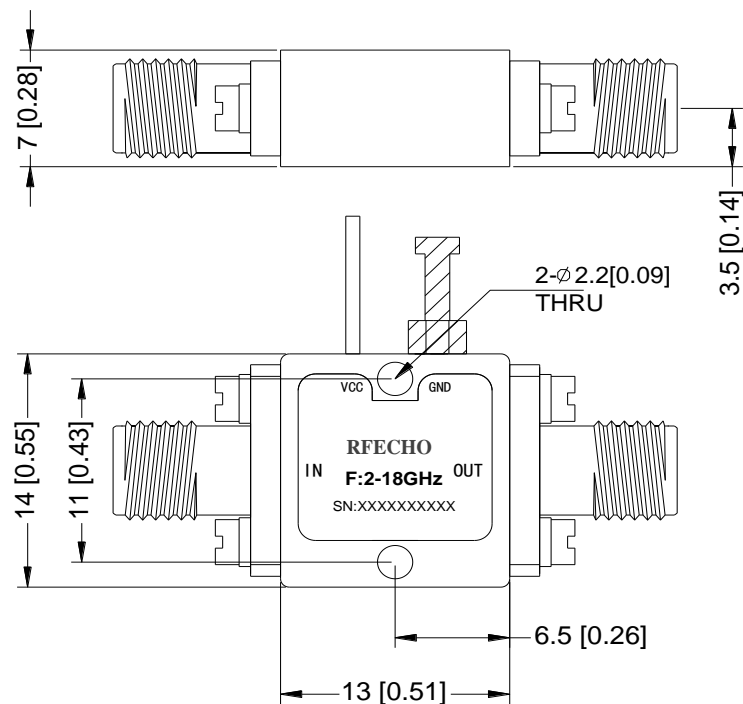
| Part No. | Description |
|-----------------|------------------------------------|
| DBVA3002001800C | 2-18GHz Voltage Control Attenuator |

Environmental Specifications

| | |
|-------------------------|--|
| Operational Temperature | -40°C~+85°C |
| Storage Temperature | -50°C~+105°C |
| Altitude | 30,000 ft. (Epoxy Sealed Controlled environment) |
| | 60,000 ft. 1.0psi min (Hermetically Sealed Un-controlled environment) (Optional) |
| Vibration | 25g RMS (15 degrees 2KHz) endurance, 1 hour per axis |
| Humidity | 100% RH at 35°C, 95%RH at 40°C |
| Shock | 20G for 11msec half sine wave, 3 axis both directions |

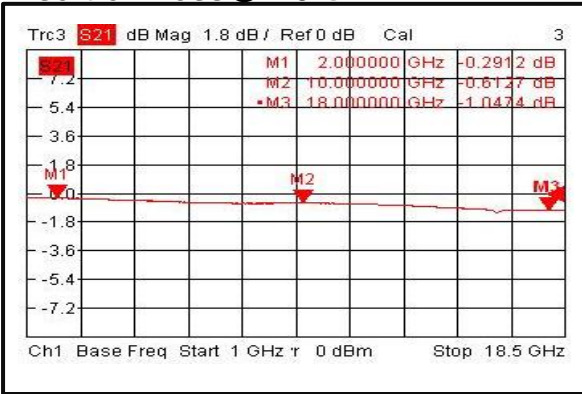
Outline Drawing:

All Dimensions in mm (inches)

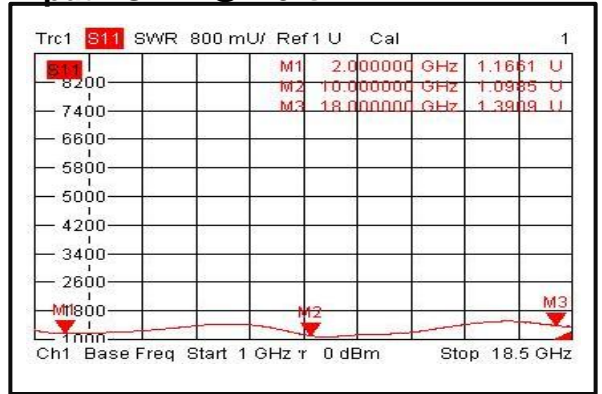




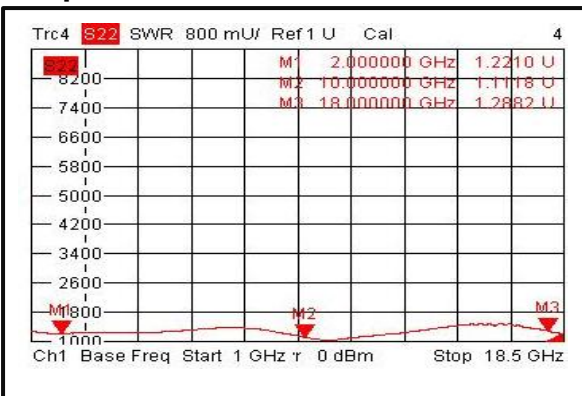
Insertion Loss @+25°C



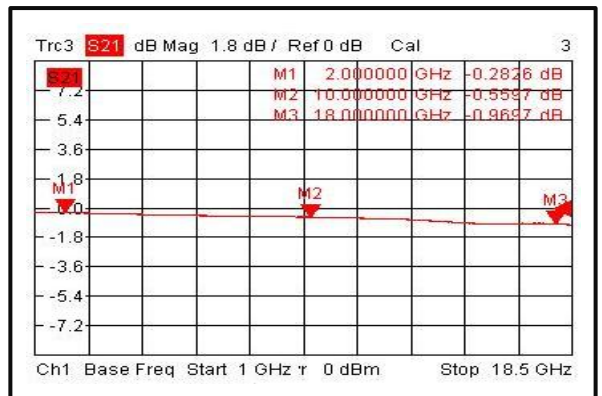
Input VSWR @+25°C



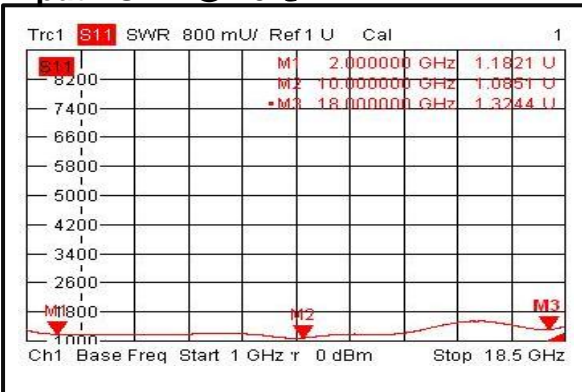
Output VSWR @+25°C



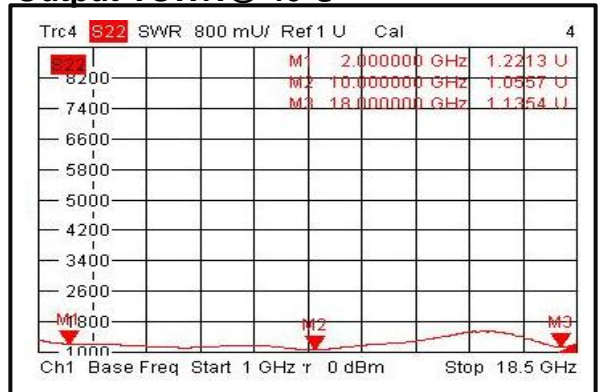
Insertion Loss @-40°C



Input VSWR @-40°C

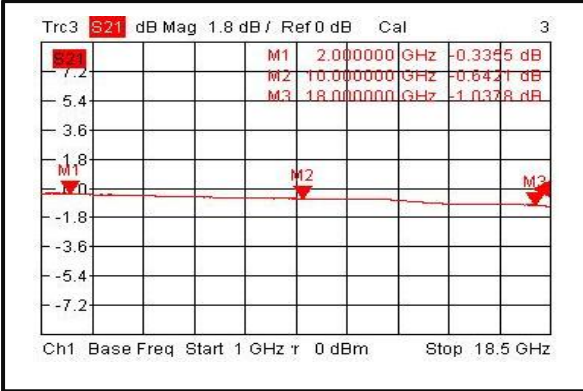


Output VSWR @-40°C

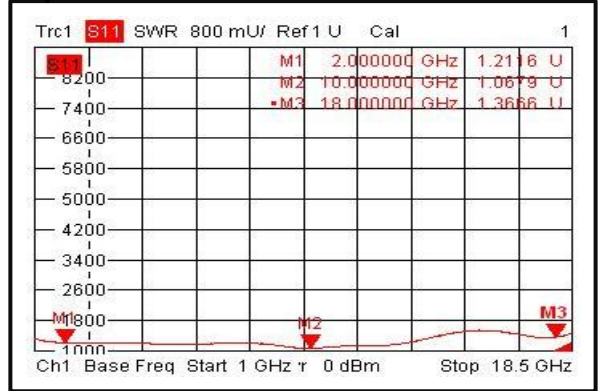




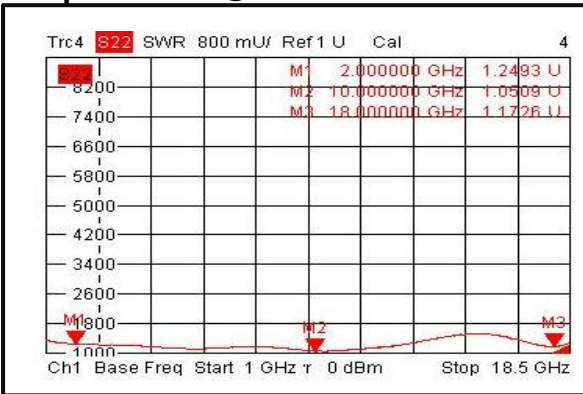
Insertion Loss @ +85°C



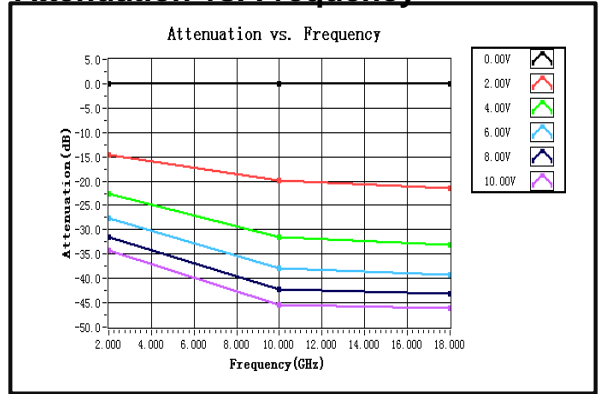
Input VSWR @ +85°C



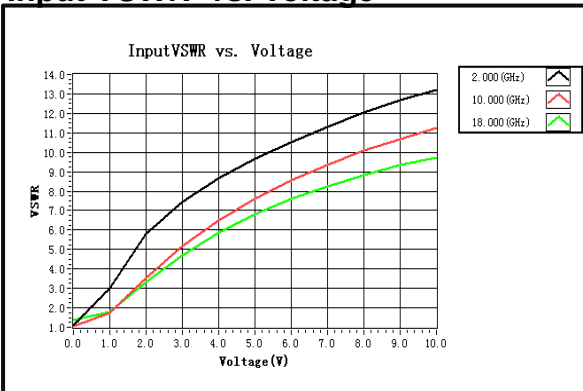
Output VSWR @ +85°C



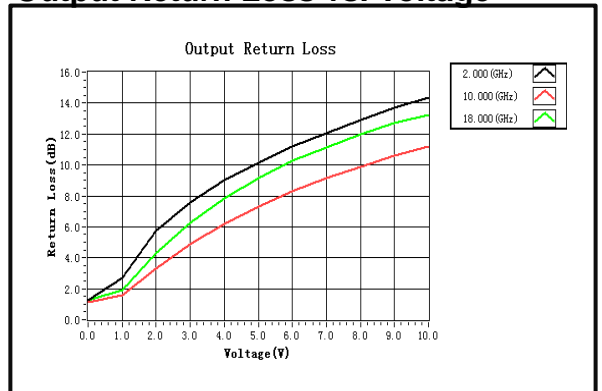
Attenuation vs. Frequency



Input VSWR vs. Voltage

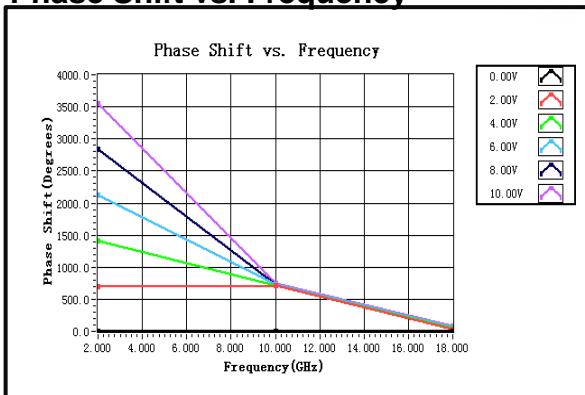


Output Return Loss vs. Voltage

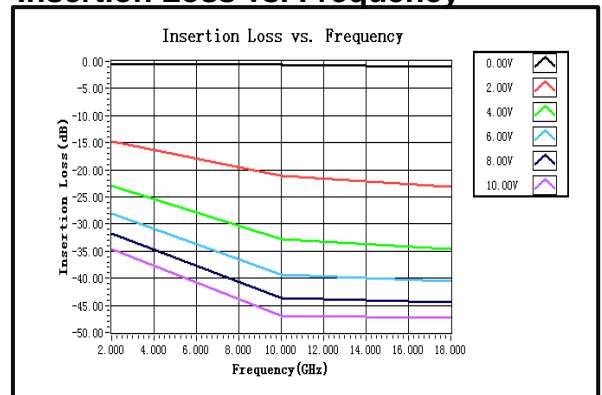




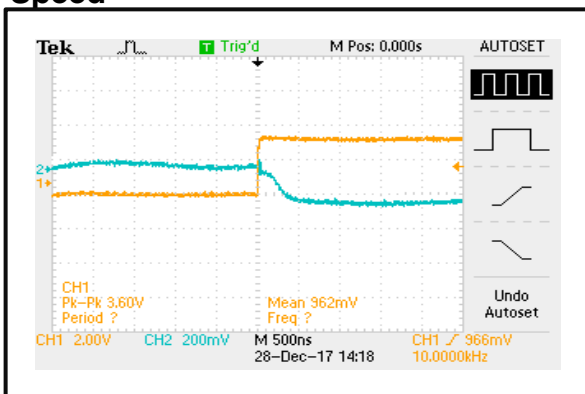
Phase Shift vs. Frequency



Insertion Loss vs. Frequency



Speed



Speed

