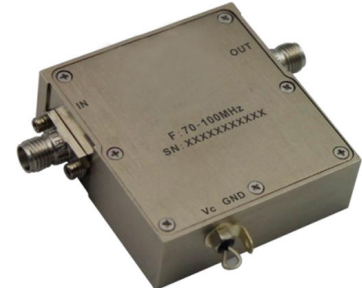




Voltage Control Phase Shifter 70-100MHz

Features

- Wide Band Operation 70-100MHz
- 360° Phase Shift
- Low Insertion Loss and Low Phase Error
- Single Control Operation
- Customization available upon request



| Parameters | Min. | Typ. | Max. | Units |
|----------------------------------------|-------------------------------|------|------|--------|
| Frequency Range | 70~100 | | | MHz |
| Phase Range | | 360 | | deg |
| Phase Error | | ±20 | | deg |
| Insertion Loss | | 4.0 | 5.0 | dB |
| Insertion Loss Temperature Coefficient | | 0.01 | | dB/ °C |
| Input VSWR | | 1.5 | 2.0 | :1 |
| Output VSWR | | 1.5 | 2.0 | :1 |
| 0.1dB Compression Point (P0.1dB) | | 30 | | dBm |
| Control Voltage | 0 | 10 | | V |
| current | 5 | | | mA |
| Impedance | 50 | | | Ω |
| Weight | 2.2 Max. | | | ounces |
| Input / Output Connectors | SMA-Female | | | |
| Finish | Nickel Plated | | | |
| Material | Aluminum | | | |
| Sealing | Hermetically Sealed(optional) | | | |



Absolute Maximum Ratings

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

Environmental Specifications

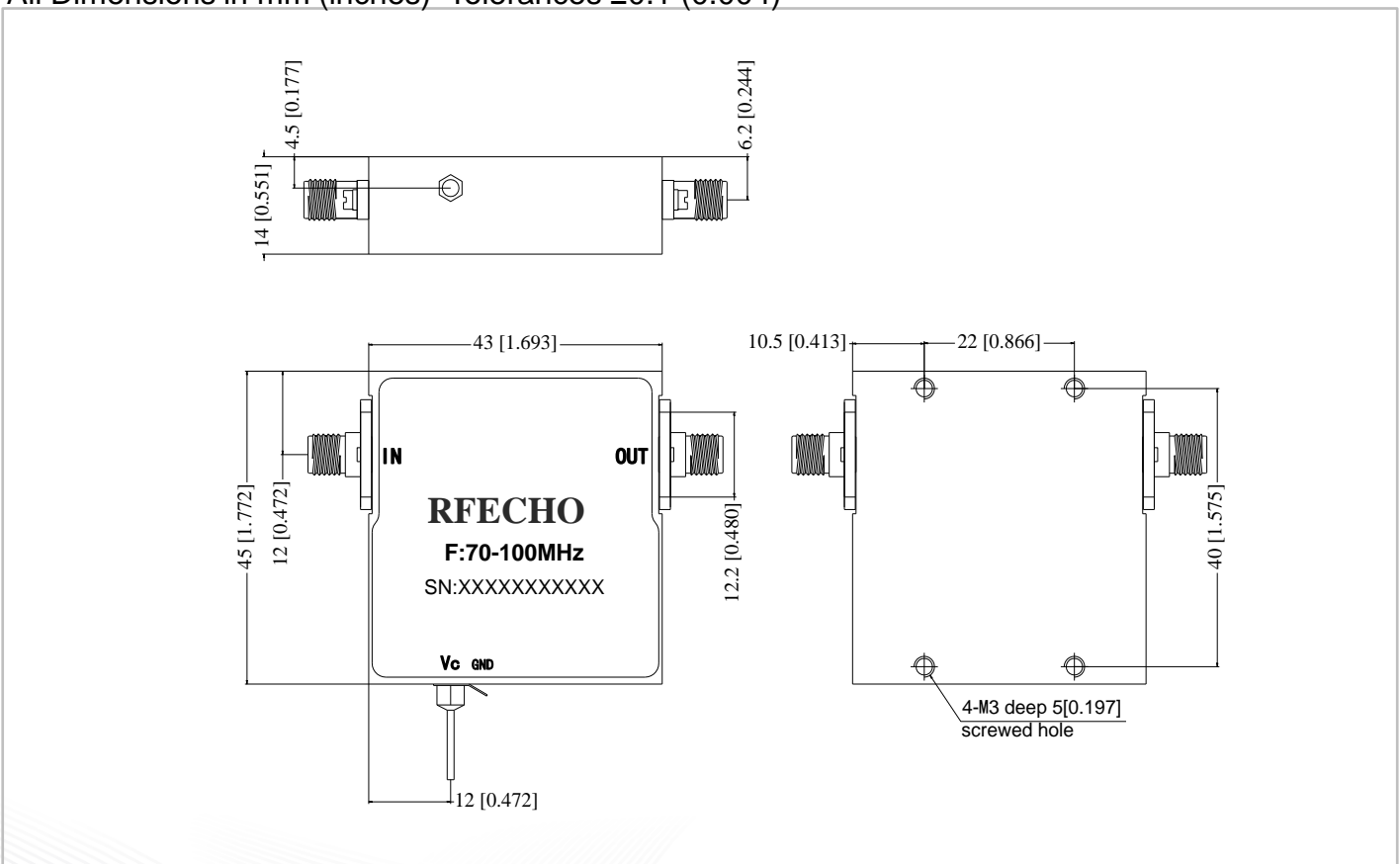
| | |
|-------------------------|----------------------------------------------------------------------------------|
| Operational Temperature | -40°C~+85°C |
| Storage Temperature | -50°C~+105°C |
| Altitude | 30,000 ft. (Epoxy Sealed Controlled environment) |
| | 60,000 ft. 1.0psi min (Hermetically 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 |

Ordering Information

| Part No. | Description |
|-----------------|---------------------------------|
| DBVCPS00070010A | 70-100MHz Voltage Phase Shifter |

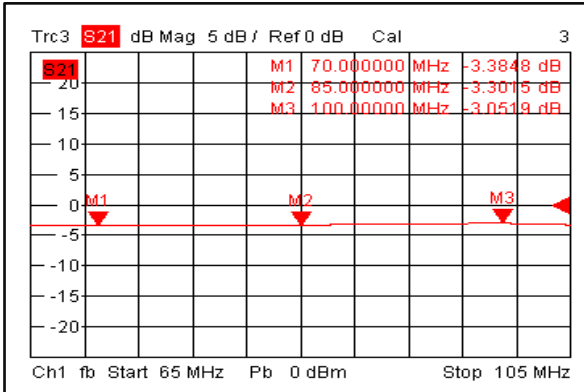
Outline Drawing:

All Dimensions in mm (inches) Tolerances ± 0.1 (0.004)

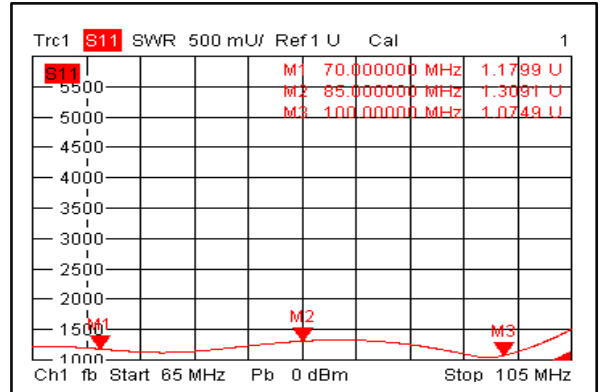




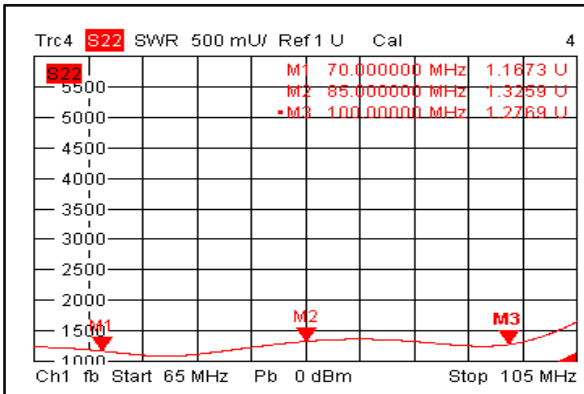
Insertion Loss @ +25°C



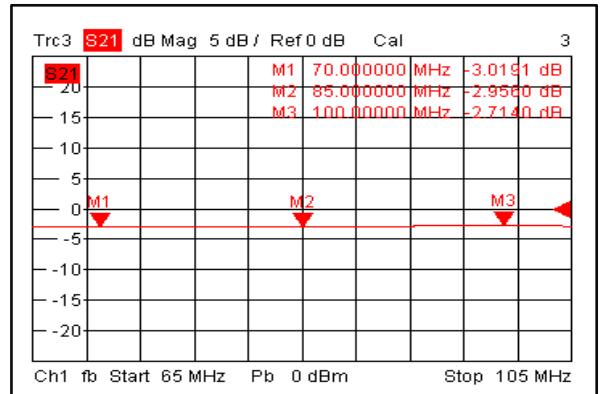
Input VSWR @ +25°C



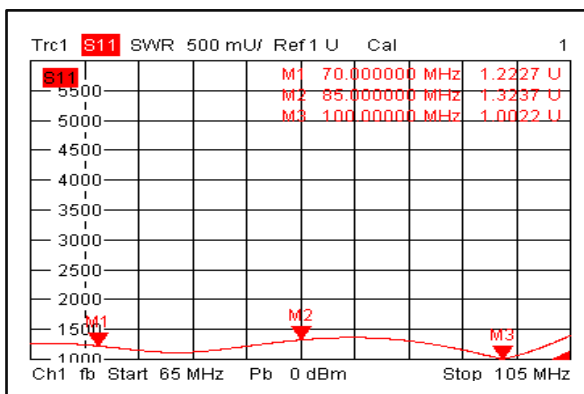
Output VSWR @ +25°C



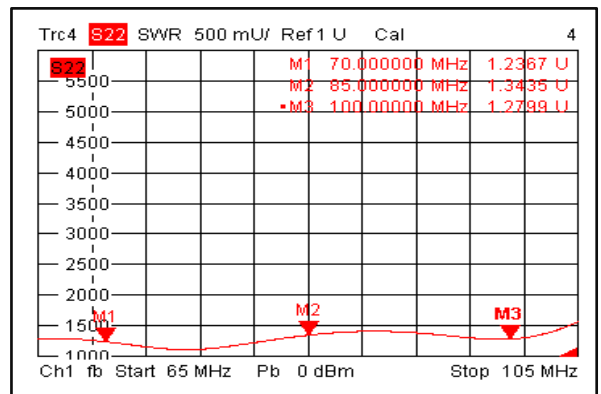
Insertion Loss @ -40°C



Input VSWR @ -40°C

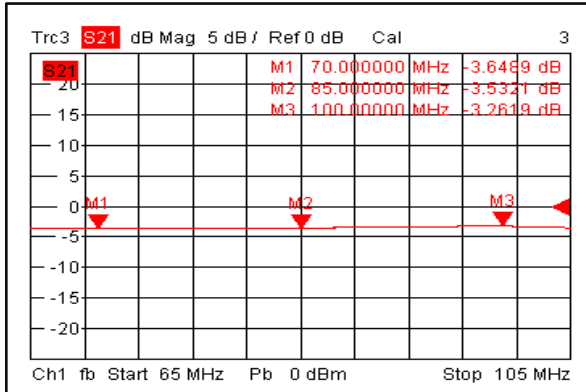


Output VSWR @ -40°C

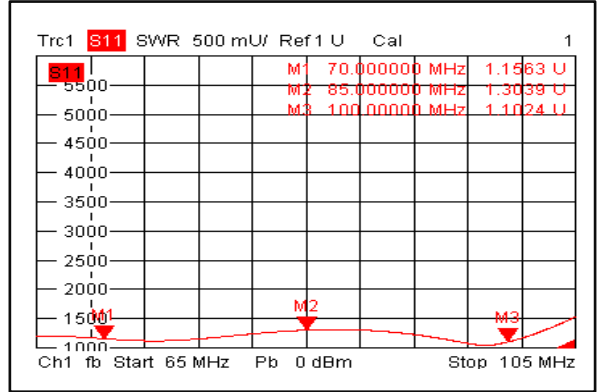




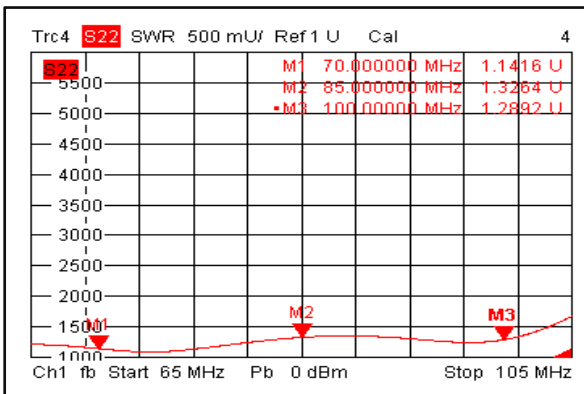
Insertion Loss @ +85°C



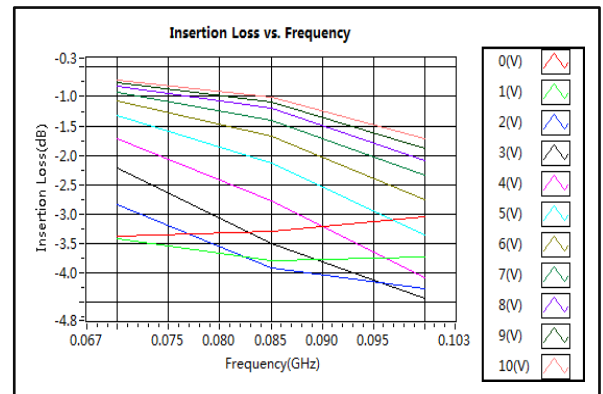
Input VSWR @ +85°C



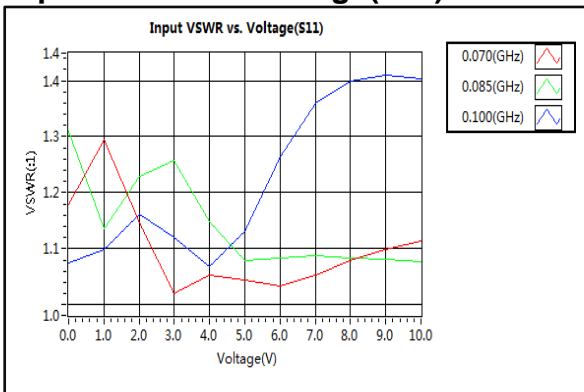
Output VSWR @ +85°C



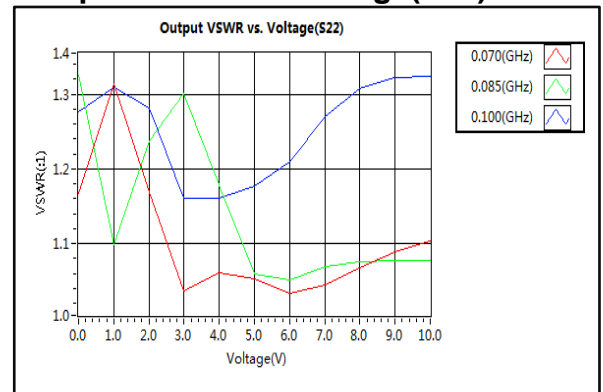
Insertion Loss vs. Frequency



Input VSWR vs. Voltage (S11)

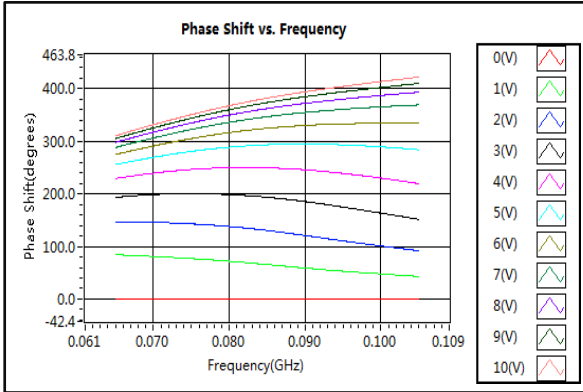


Output VSWR vs. Voltage (S22)

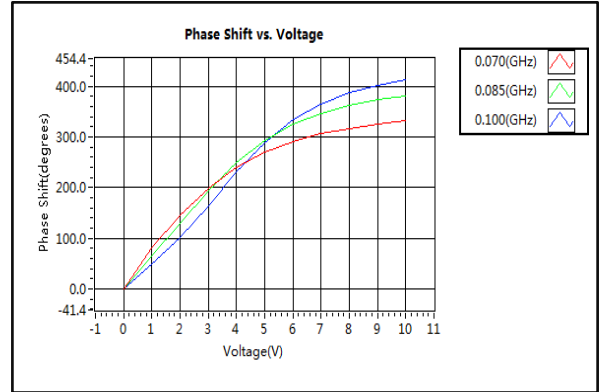




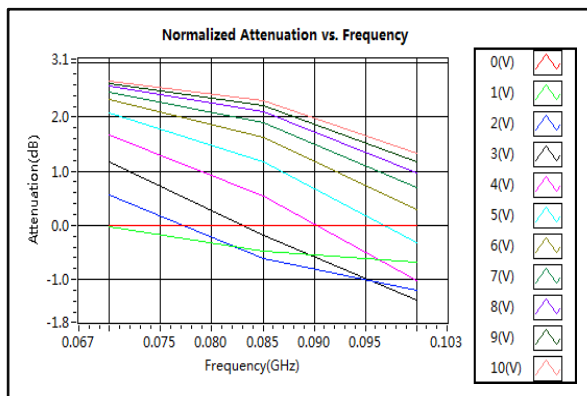
Phase Shift vs. Frequency



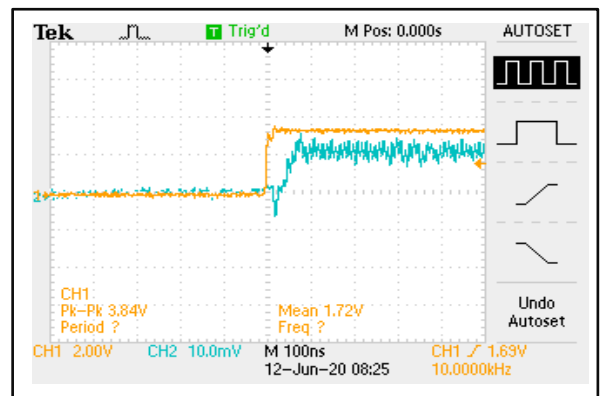
Phase Shift vs. Voltage



Normalized Attenuation vs. Frequency



Speed



Speed

