



Voltage Control Phase Shifter 2 - 4GHz



Features

- Wide Band Operation 2-4GHz
- 360° Phase Shift
- Low Insertion Loss and Low Phase Error
- Single Control Operation
- Customization available upon request

Electrical Specifications, TA = +25 °C

Description	PN:RVPT0204GAC			
	Voltage Control Phase Shifter			
Parameter	Min	Typ.	Max	Units
Frequency Range	2 ~ 4			GHz
Phase Range	180	360		deg
Phase Error		±10	±15	deg
Insertion Loss		4.0	5.5	dB
Insertion Loss Temperature Coefficient		0.1		dB/°C
Input VSWR		2.0	2.8	: 1
Output VSWR		2.0	2.8	: 1
0.1dB Compression Point (Po.1dB)		25		dBm
Control Voltage	0	10		V
current		5		mA
Impedance		50		Ω
Weight		0.35		ounces
Input / Output Connectors	SMA-Female			
Finish	Gold Plated			
Material	Aluminum			
Sealing	Hermetically Sealed (Optional)			



Absolute Maximum Ratings

Control Voltage	15V
RF Input Power	+27dBm

Ordering Information

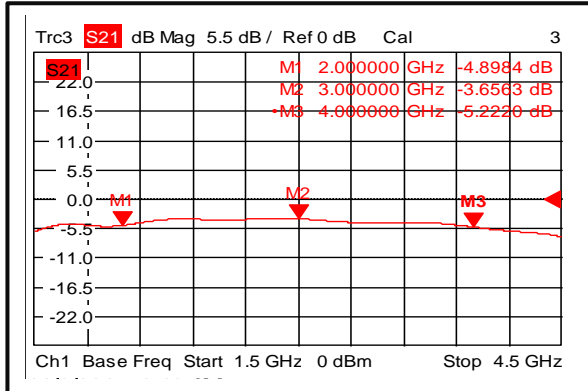
Part No.	ECCN	Description
RVPT0204GAC	EAR99	2-4GHz Voltage Control Phase Shifter

Environmental Specifications and Test Standards

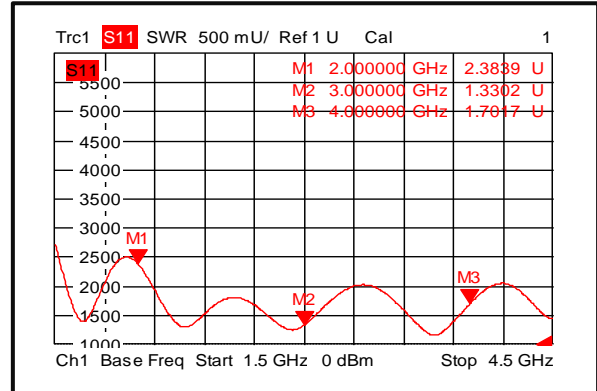
Parameter	Standard	Description
Operational Temperature	MIL-STD-39016	-45°C~+85°C
Storage Temperature		-55°C~+125°C
Thermal Shock		1 Hour@ -45°C → 1 Hour @ +85°C (5 Cycles)
Random Vibration		Acceleration Spectral Density 6 (m/s) Total 92.6 RMS
Electrical & Temperature Burn In		Temperature +85°C for 72 Hours
Shock		1. Weight >20g, 50g half sine wave for 11ms, Speed variation 3.44m/s 2. Weight <=20g, 100g Half sine wave for 6ms, Speed variation 3.75m/s 3. Total 18 times (6 directions, 3 repetitions per direction).
Altitude		Standard: 30,000 Ft (Epoxy Sealed Controlled Environment) Optional: Hermetically Sealed (60,000 ft. 1.0 PSI min)
Hermetically Sealed (Optional)	MIL-STD-883	MIL-STD-883 (For Hermetically Sealed Units)

Typical Performance Plots

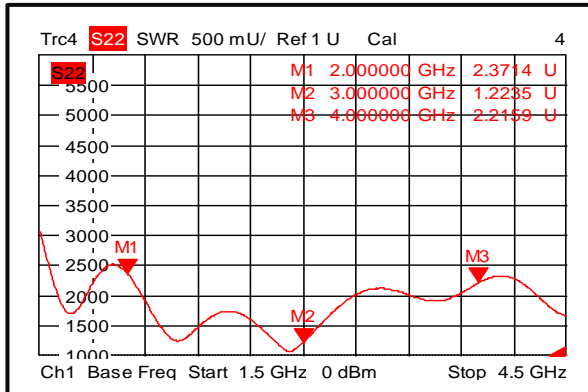
Insertion Loss



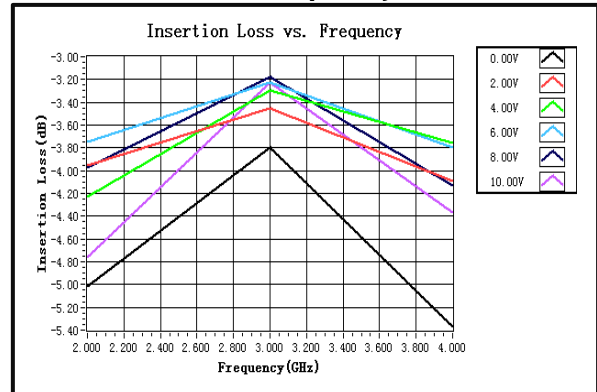
Input VSWR



Output VSWR

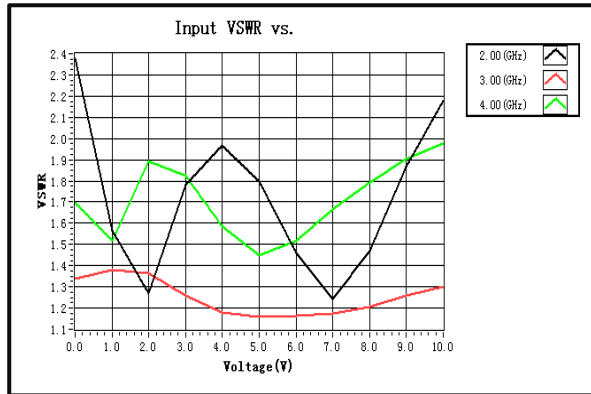


Insertion Loss vs. Frequency

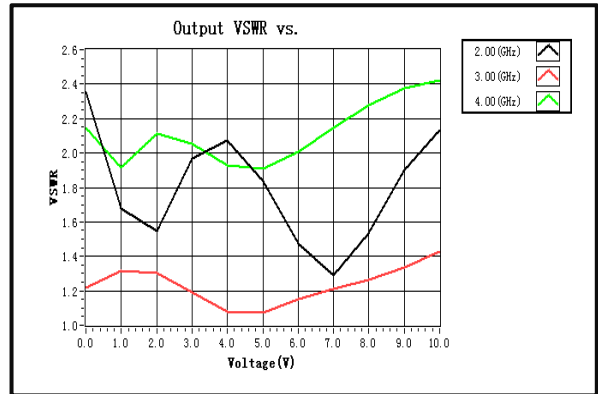




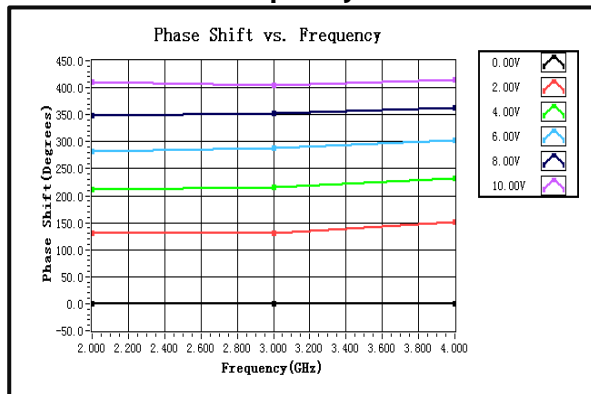
Input VSWR VS. Voltage



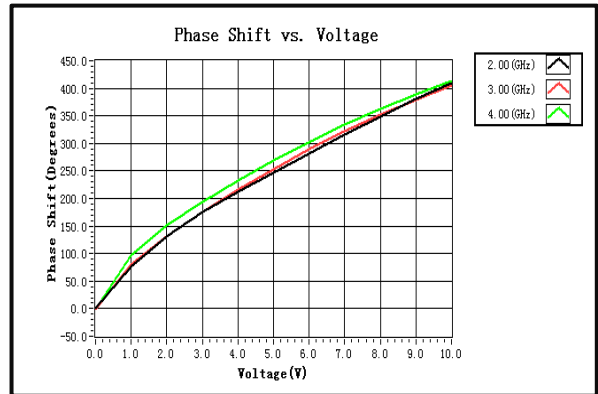
Output VSWR vs. Voltage



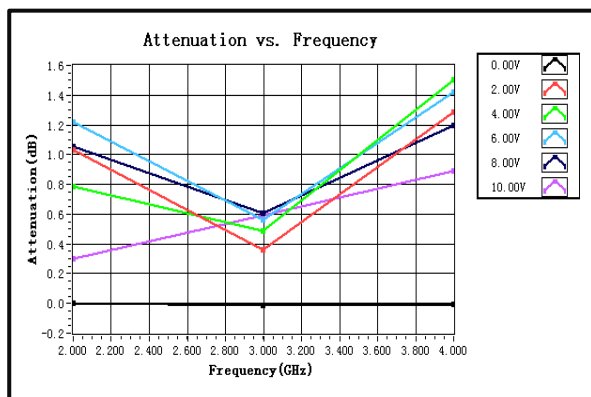
Phase Shift vs. Frequency



Phase Shift vs. Voltage



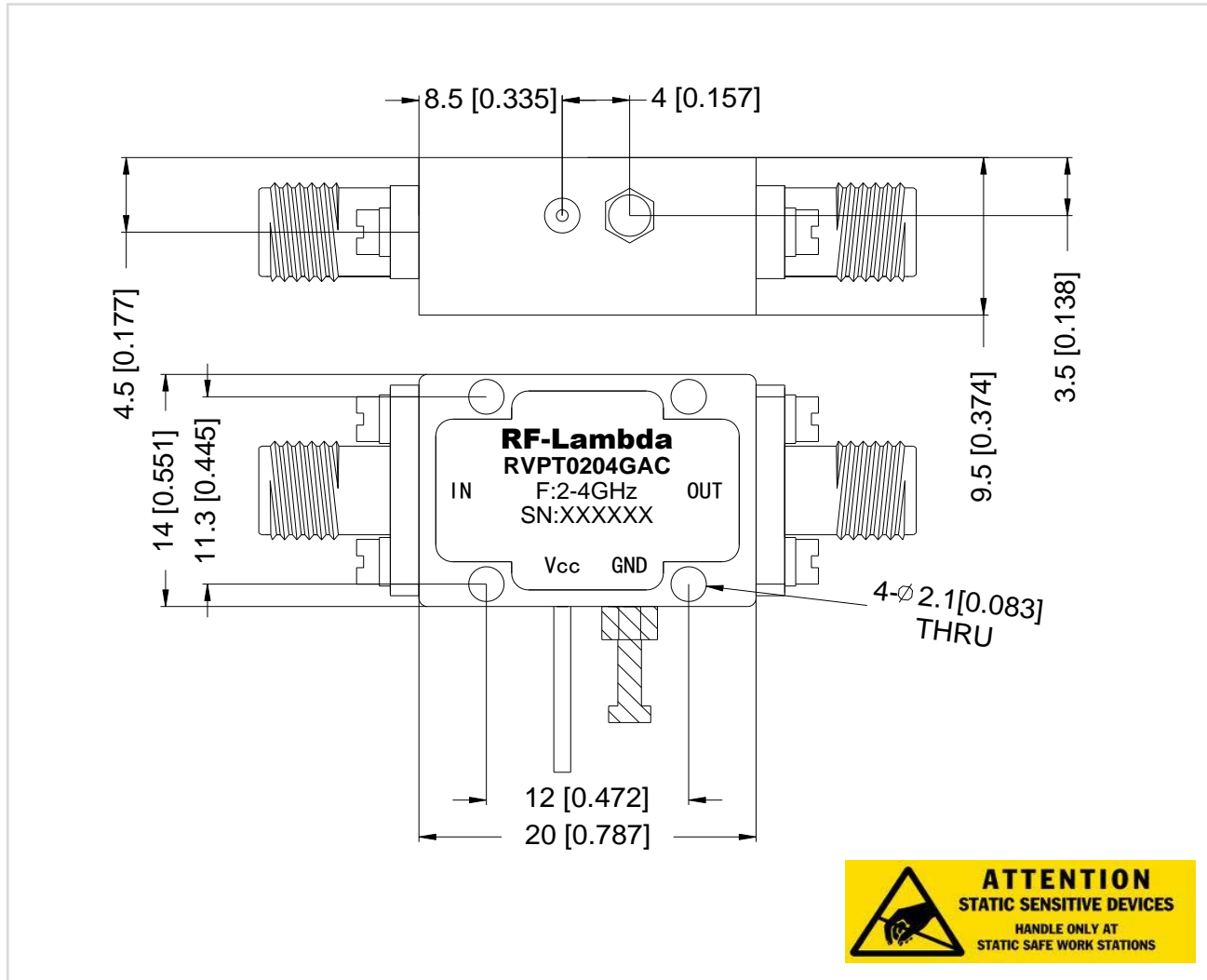
Attenuation vs. Frequency





Outline Drawing:

All Dimensions in mm [inches]



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