

Features

- Wide Band Operation 22-33GHz
- 360° Phase Shift
- Low Insertion Loss and Low Phase Error
- Single Voltage Control Operation



Parameter	Min	Typ.	Max	Min	Typ.	Max	Units
Frequency Range	24.5		31	22		33	GHz
Phase Range	360			360			deg
Insertion Loss		13	15		15	23	dB
Insertion Loss Temperature Coefficient		0.003			0.003		dB/ °C
Phase Flatness		±20			±40		deg
Control Voltage	0	14		0	14		V
Input VSWR		3			3.5		:1
Output VSWR		3.5			4.0		:1
0.1dB Compression Point (P0.1dB)		15			15		dBm
Current	1 Max.						mA
Impedance	50						Ω
Weight	0.4 Max.						Ounces
Input / Output Connectors	2.92mm-Female						
Finish	Gold Plated						
Material	Aluminum						
Package Sealing	Hermetically Sealed (Optional)						

QOTANA TECHNOLOGIES

Voltage Control Phase Shifter 22-33GHz

Absolute Maximum Ratings

Control Voltage	0~ 18V
RF Input power	+15dBm

Environmental Specifications

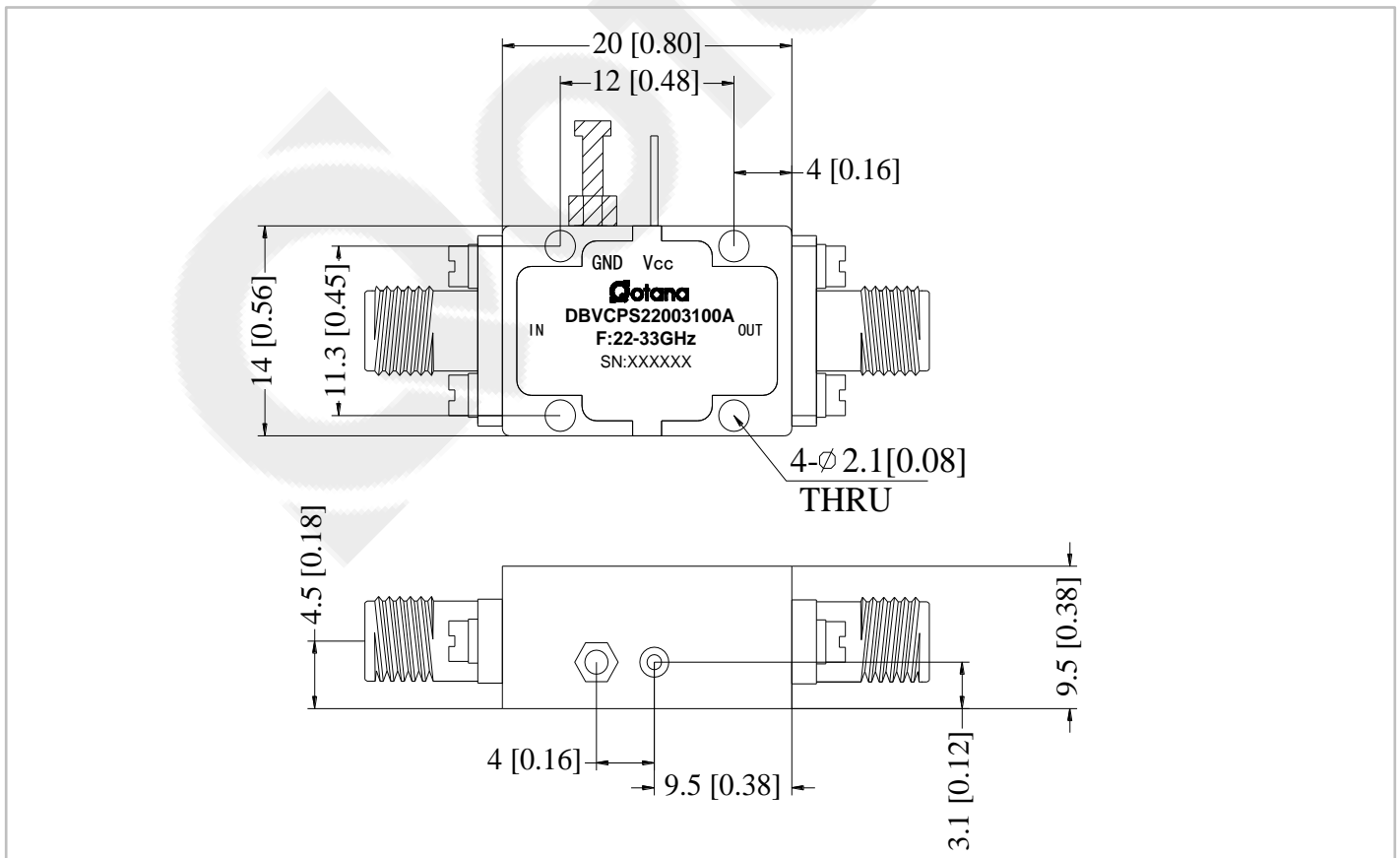
Operational Temperature	-40°C~+85°C
Storage Temperature	-50°C~+105°C
Altitude	30,000 ft. (Epoxy Sealed Controlled environment)
	60,000 ft. 1.0psi min (Hermetically Sealed Un-controlled environment) (Optional)
Vibration	25g RMS (15 degrees 2KHz) endurance, 1 hour per axis
Humidity	100% RH at 35°C, 95%RH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

Ordering Information

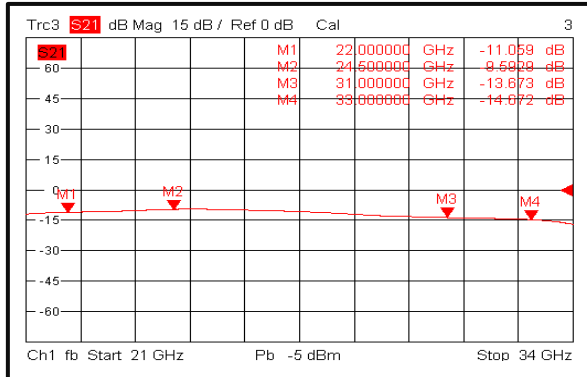
Part No.	Description
DBVCPS22003100A	22-33GHz Voltage Control Phase Shifter

Outline Drawing:

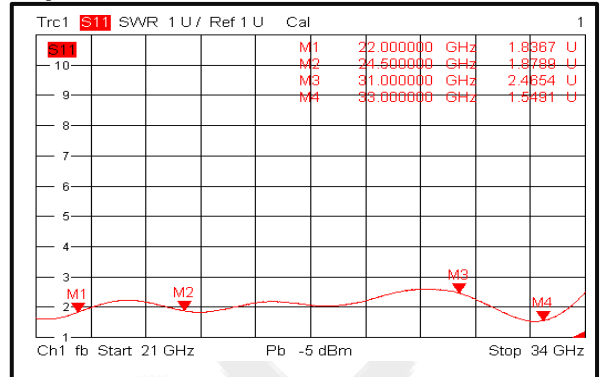
All Dimensions in mm (inches)



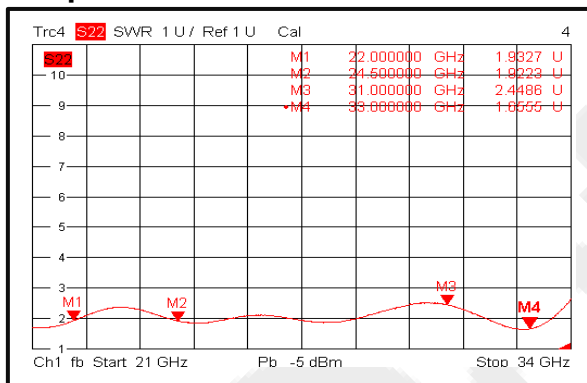
Insertion Loss @ +25°C



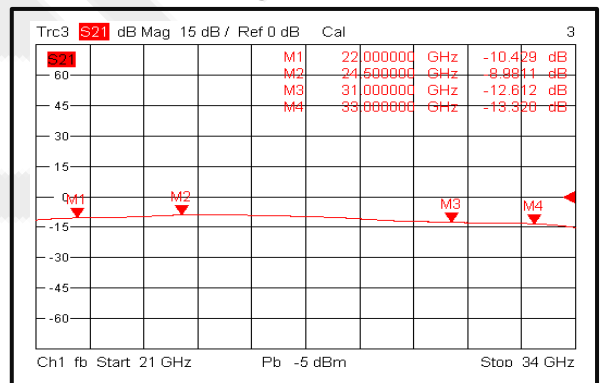
Input VSWR @ +25°C



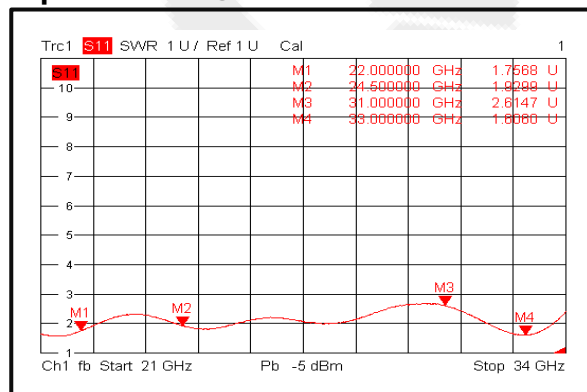
Output VSWR @ +25°C



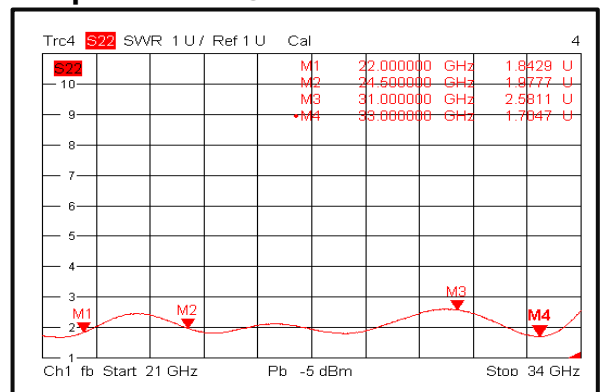
Insertion Loss @ -40°C



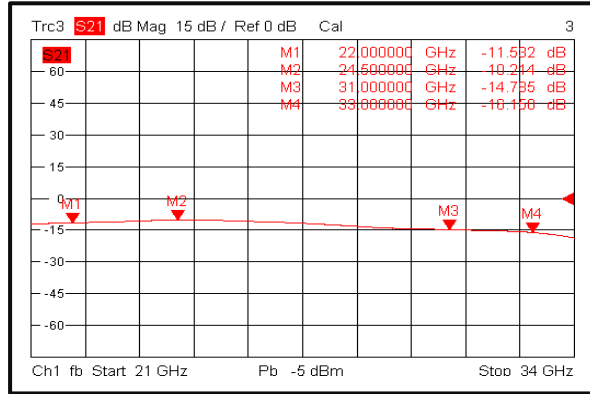
Input VSWR @ -40°C



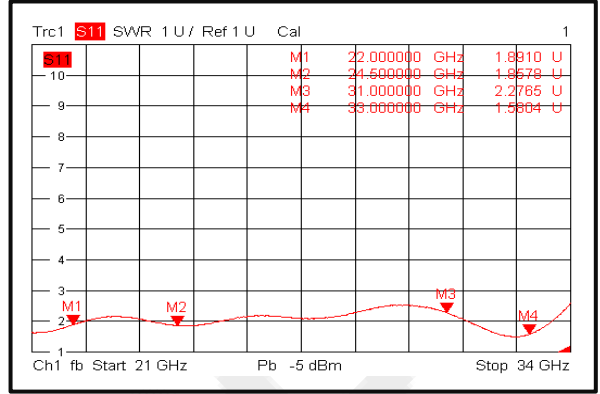
Output VSWR @ -40°C



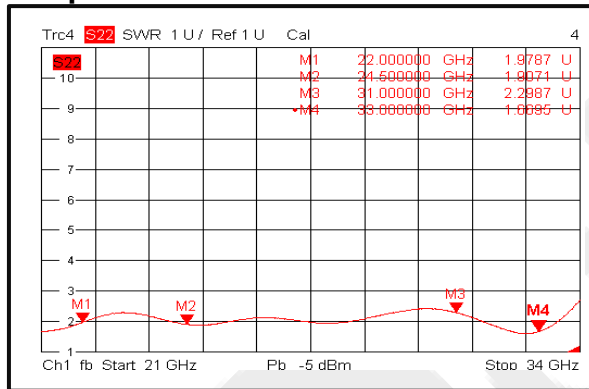
Insertion Loss @ +85°C



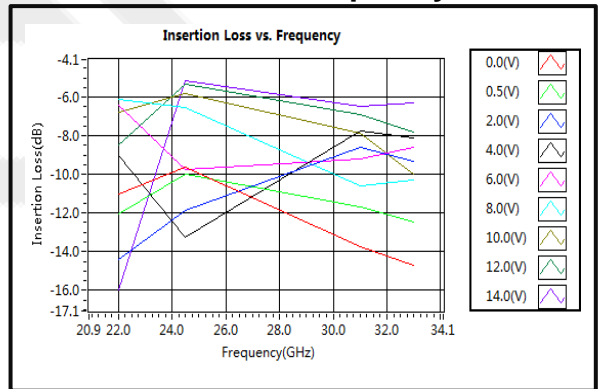
Input VSWR @ +85°C



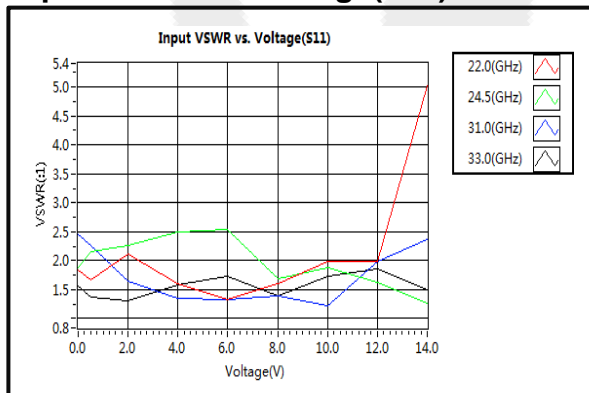
Output VSWR @ +85°C



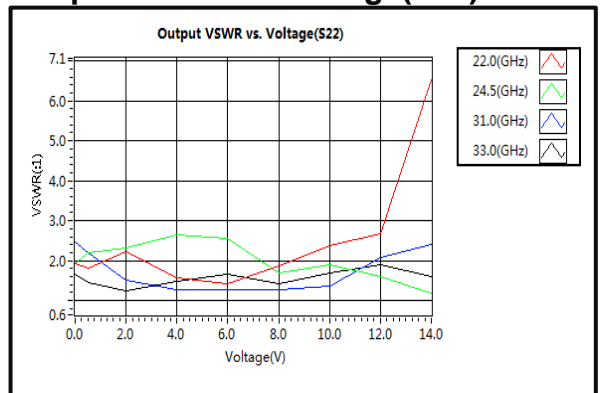
Insertion Loss vs. Frequency



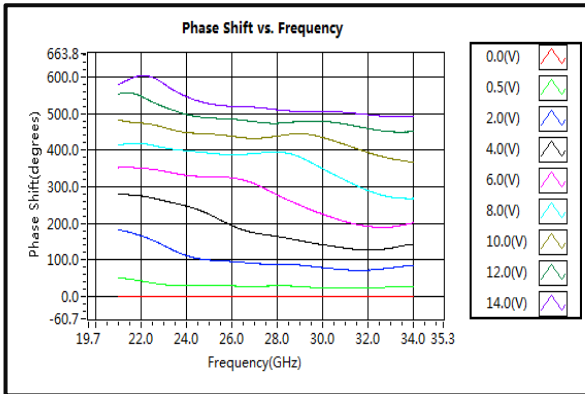
Input VSWR vs. Voltage (S11)



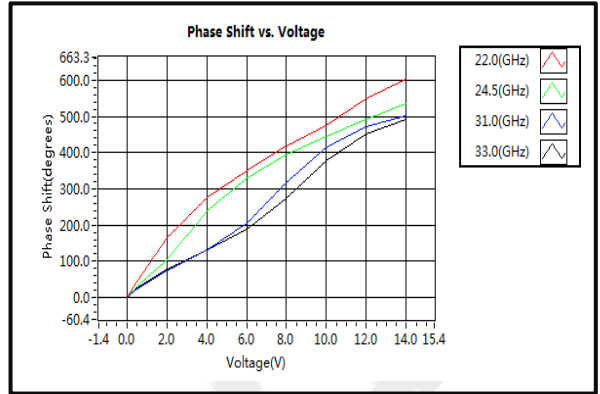
Output VSWR vs. Voltage (S22)



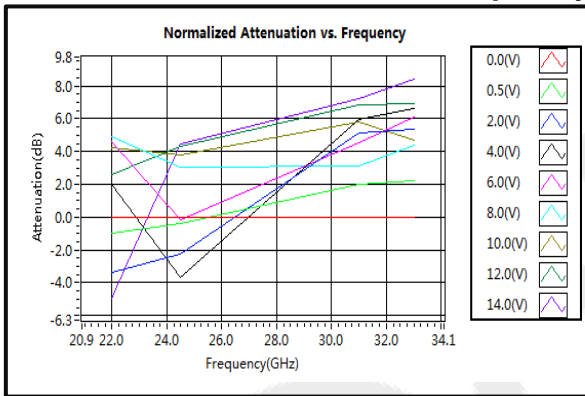
Phase Shift vs. Frequency



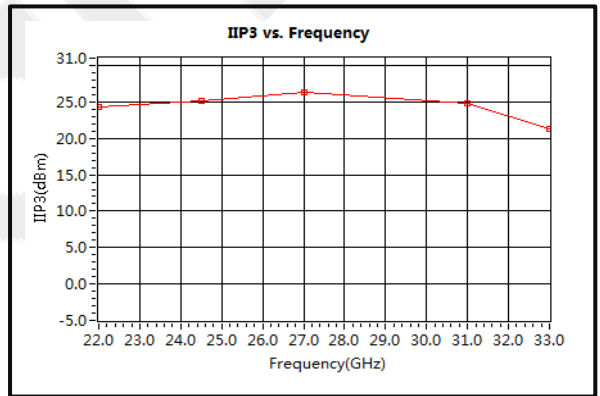
Phase Shift vs. Voltage



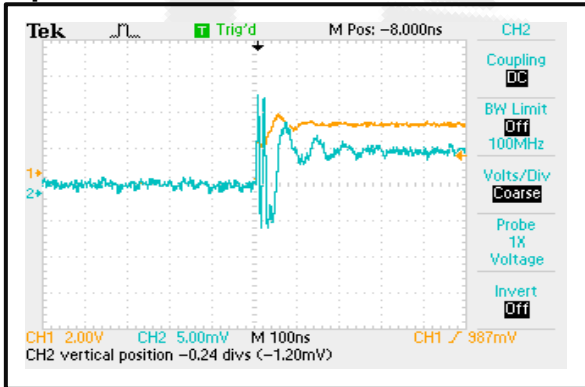
Normalized Attenuation vs. Frequency



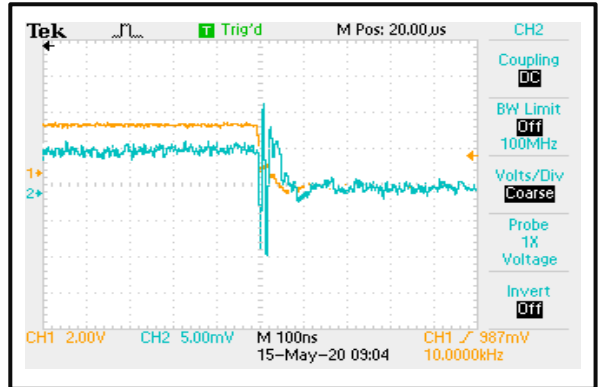
IIP3



Speed



Speed



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