

Features

- Wide Band Operation 1-2GHz
- Wide Attenuation Range 50dB
- Reflective Topology
- Single Control Operation
- Customization available upon request



Parameters	Min.	Typ.	Max.	Units
Frequency Range		1-2		GHz
Attenuation Range	50			dB
Insertion Loss		0.7	0.8	dB
Insertion Loss Temperature Coefficient		0.003		dB/ °C
Input VSWR		1.2	1.4	: 1
Output VSWR		1.2	1.4	: 1
0.1dB Compression Point(P0.1dB)			30	dBm
Input Ip3		45		dBm
Control Voltage	0	10		V
Switching Speed		10		us
current		40 Max.		mA
Weight		0.5 Max.		Ounces
Impedance		50		Ω
Input / Output Connectors		SMA-Female		
Finish		Gold Plated		
Material		Aluminum		
Sealing		Hermetically Sealed (Optional)		

Absolute Maximum Ratings

Control Voltage	DC ~ 13V
RF Input power	+32dBm

Environmental Specifications

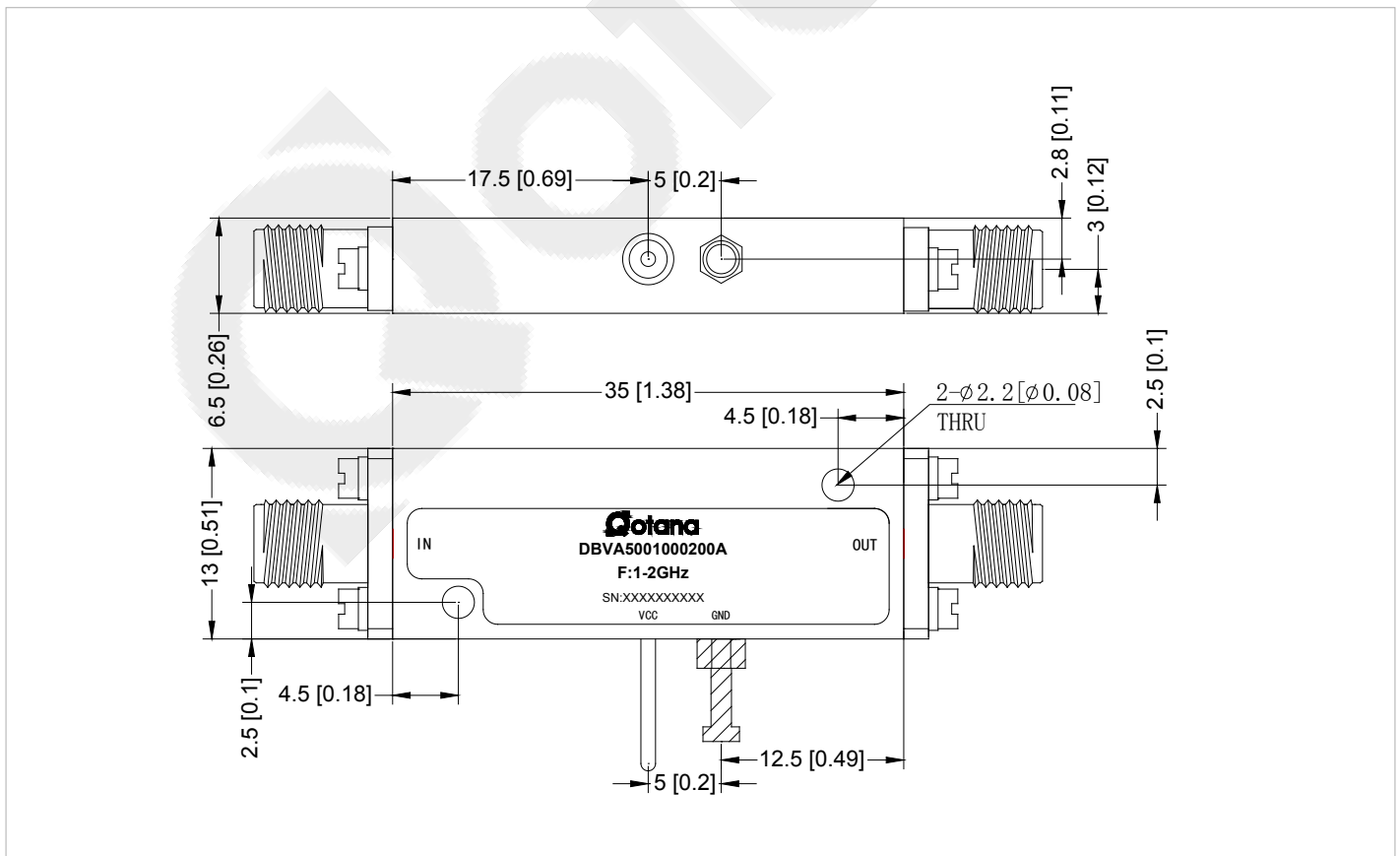
Operational Temperature	-40°C~+85°C
Storage Temperature	-50°C~+105°C
Altitude	30,000 ft. (Epoxy Sealed Controlled environment)
	60,000 ft. 1.0psi min (Hermetically Sealed Un-controlled environment) (Optional)
Vibration	25g RMS (15 degrees 2KHz) endurance, 1 hour per axis
Humidity	100% RH at 35°C, 95%RH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

Ordering Information

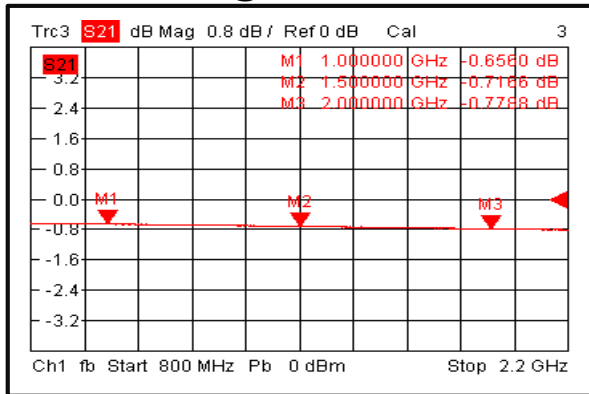
Part No.	Description
DBVA5001000200A	1-2GHz Voltage Control Attenuator

Outline Drawing:

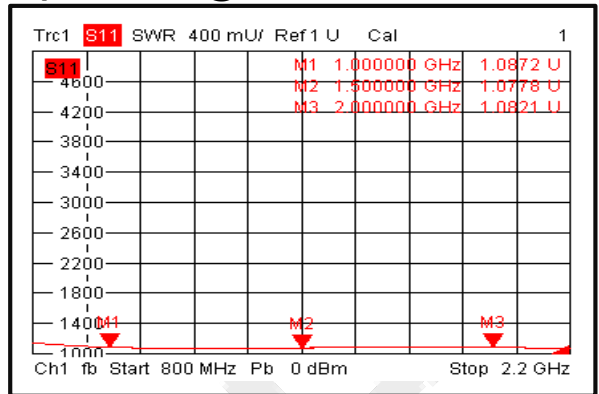
All Dimensions in mm (inches) Housing Tolerances ±0.1 (0.004)



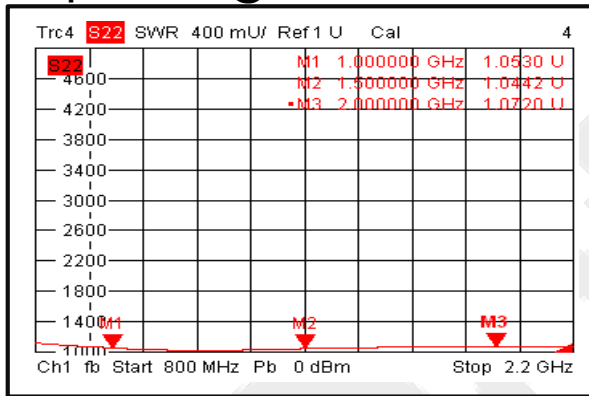
Insertion Loss@+25°C



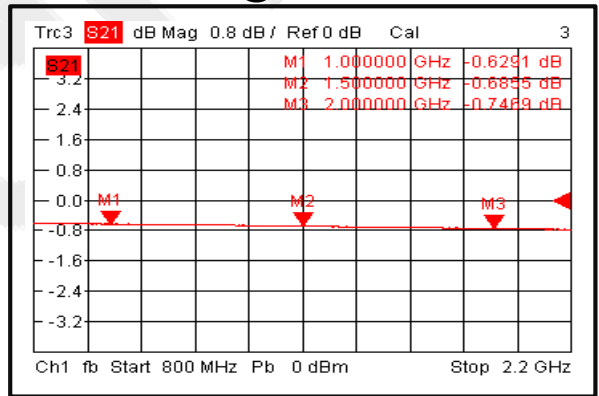
Input VSWR @+25°C



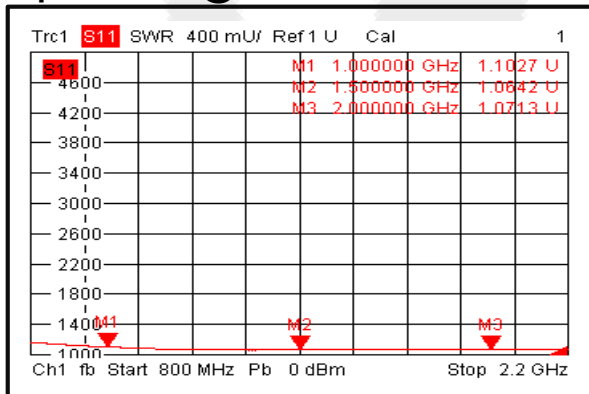
Output VSWR @+25°C



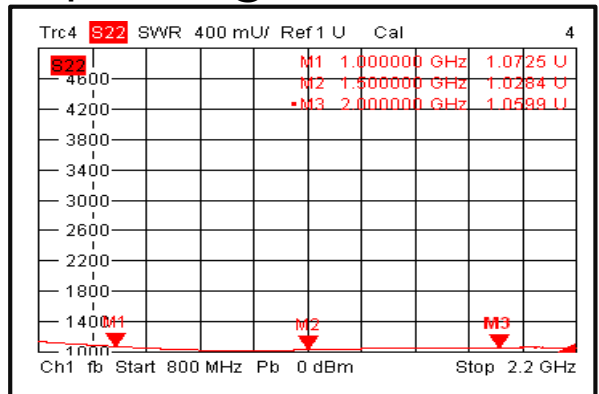
Insertion Loss @-40°C



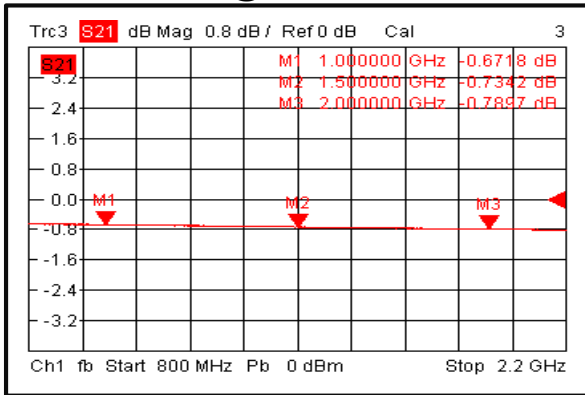
Input VSWR @-40°C



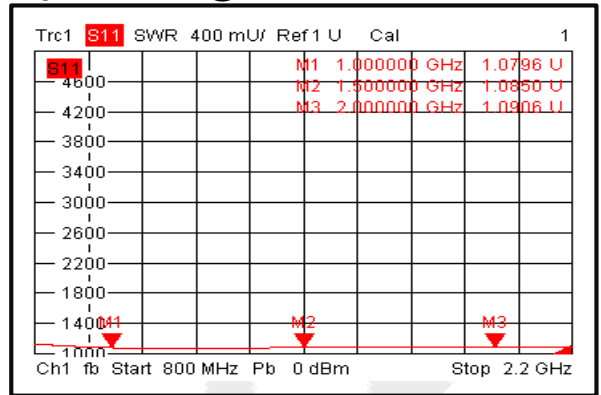
Output VSWR @-40°C



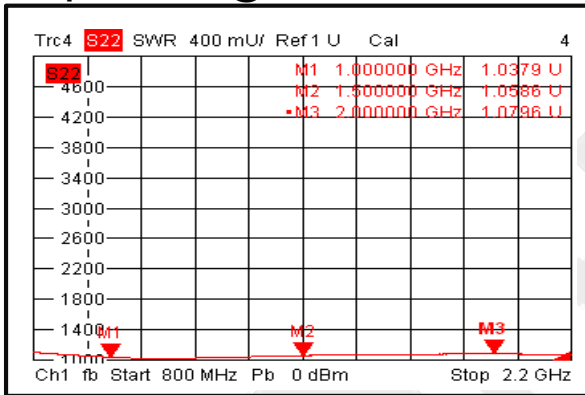
Insertion Loss@+85°C



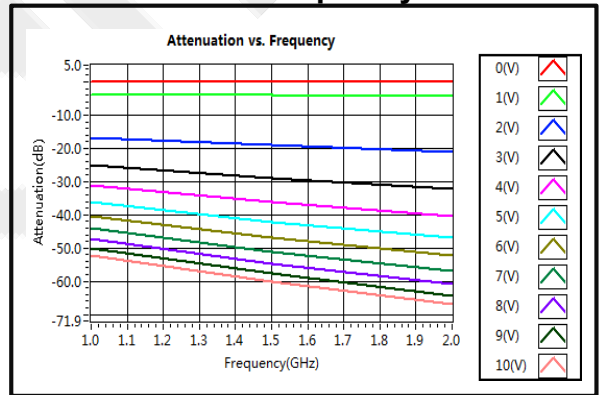
Input VSWR @+85°C



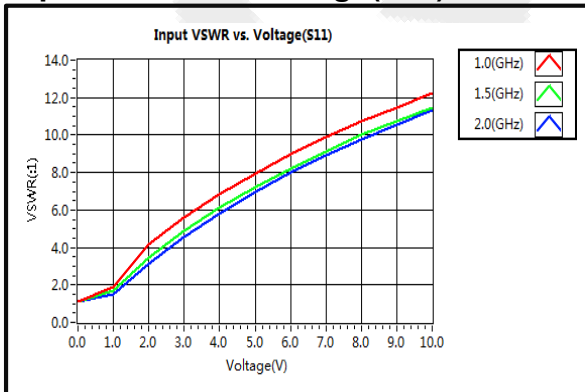
Output VSWR @+85°C



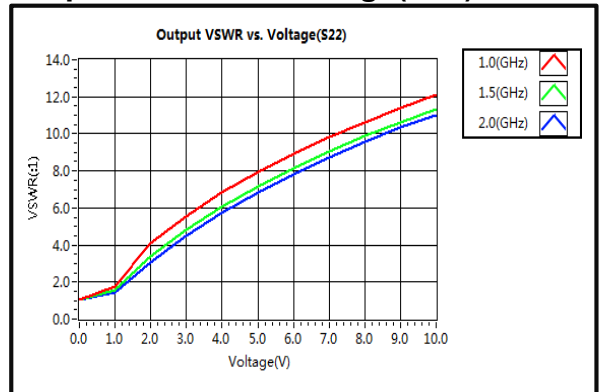
Attenuation vs. Frequency



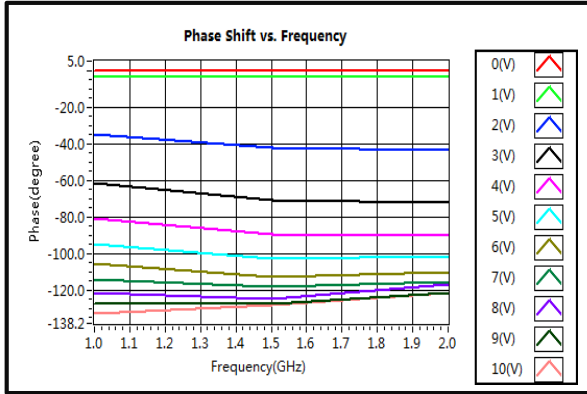
Input VSWR vs. Voltage(S11)



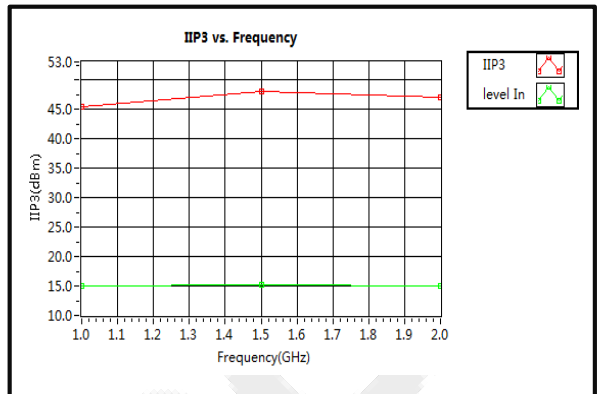
Output VSWR vs. Voltage(S22)



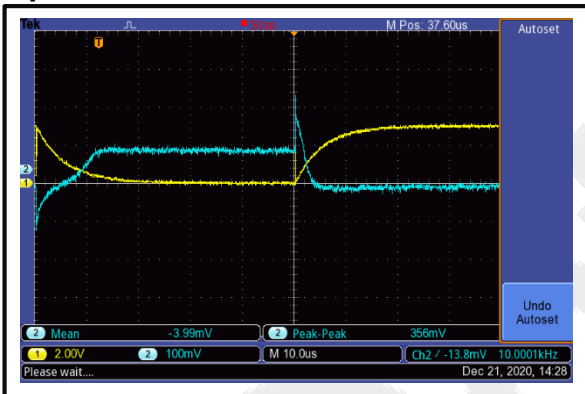
Phase Shift vs. Frequency



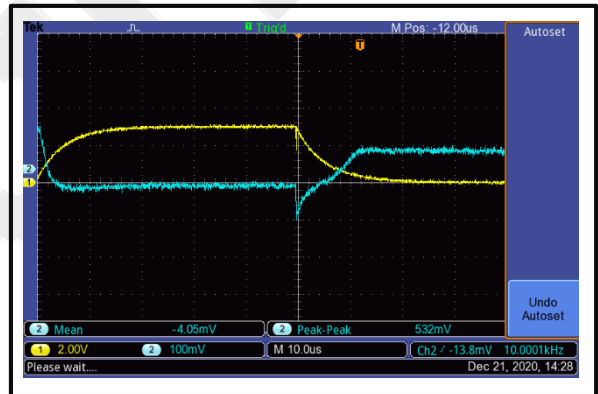
IIP3



Speed



Speed



QOTANA TECHNOLOGIES and its affiliates reserve the right to make changes to the product(s) or information contained herein without notice. Visit www.qotana.com for additional data sheets and product information.