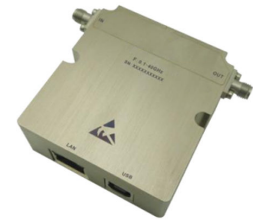




USB/Ethernet Absorptive Digital Control Attenuator 0.1 - 40GHz



Features

- Ultra Wide Band Operation 0.1-40GHz
- 1dB LSB Steps to 63dB
- USB & Ethernet Controlled and Powered

Parameter	Min.	Typ.	Max.	Min.	Typ.	Max.	Min.	Typ.	Max.	Units
Frequency Range	0.1-18			18-31			31-40			GHz
Attenuation Range		63			62			61		dB
Attenuation Flatness: (Referenced to Insertion Loss)		±4.0			±5.0			±6.0		dB
Control Bits			6			6			6	Bit
Control Step size		1			1			1		dB
Insertion Loss		10.0	11.0		12.0	13.0		14.0	15.0	dB
Insertion Loss Temperature Coefficient		0.03			0.03			0.03		dB/ °C
Input VSWR (All Atten. States)		1.8	2.1		1.9	2.0		1.9	2.0	: 1
Output VSWR (All Atten. States)		1.8	2.1		1.9	2.0		1.9	2.0	: 1
Input 0.1 dB Compression Point (P0.1dB)		25			25			25		dBm
IP3 Input		45			45			45		dBm
Switching Speed 50% CTRL* to 90% or 10%	/									us
Weight	5.0 Max.									ounces
Impedance	50									Ω
Input / Output Connectors	2.92mm-Female									
Control Connector	USB 2.0 (Control Cable Included)) & Ethernet(IPv4)									
Finish	Nickel Plated									
Material	Aluminum									
Sealing	Hermetically Sealed (Optional)									



Ordering Information

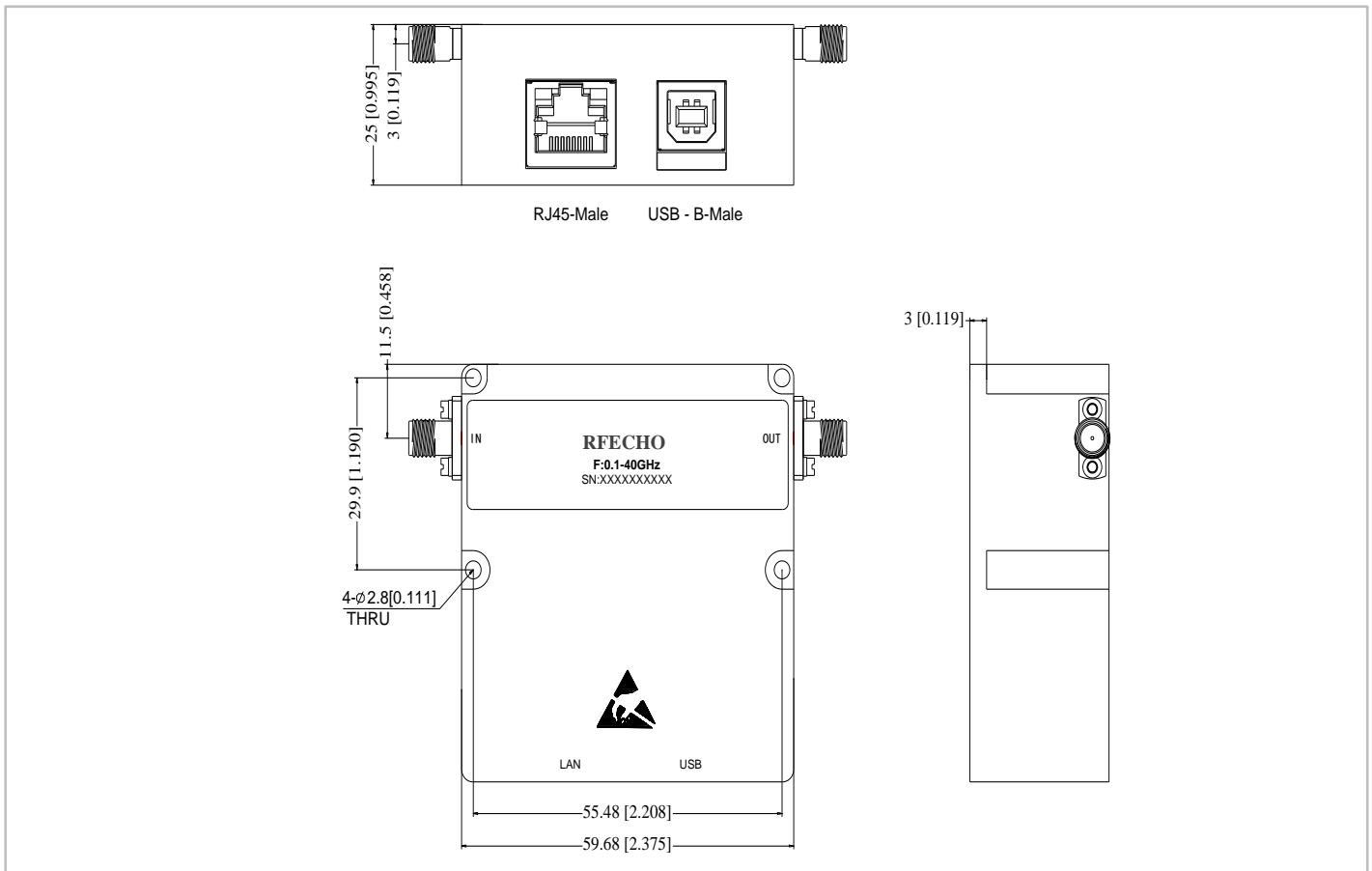
Part No.	Description
DBDA0600104000U	0.1-40GHz USB Control Attenuator

Environmental Specifications

Operational Temperature	-40°C~+85°C
Storage Temperature	-50°C~+105°C
Vibration	25g RMS (15 degrees 2KHz) endurance, 1 hour per axis
Shock	20G for 11msec half sine wave, 3 axis both directions

Outline Drawing:

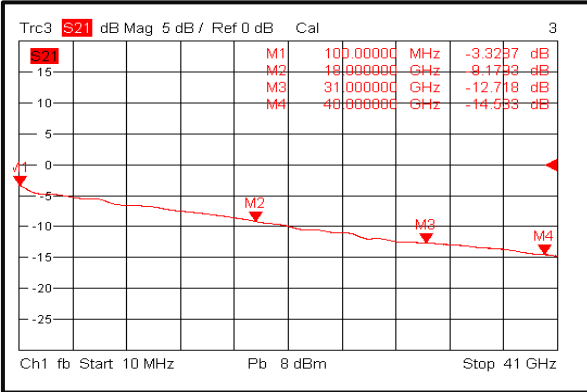
All Dimensions in mm (inches) Tolerances $\pm 0.2(0.008)$



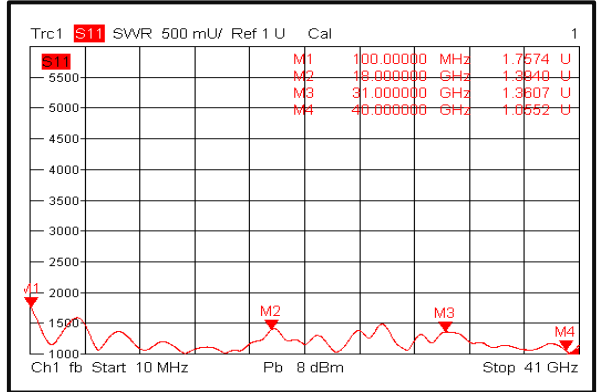
ID	Packing List	QTY
1	Fig a. USB/Ethernet Control RF Attenuator	1
2	Fig b. USB2.0 Cable (5 feet / 1.5 meter)	1
3	Fig c. Network Cable (6 feet / 2 meter)	1



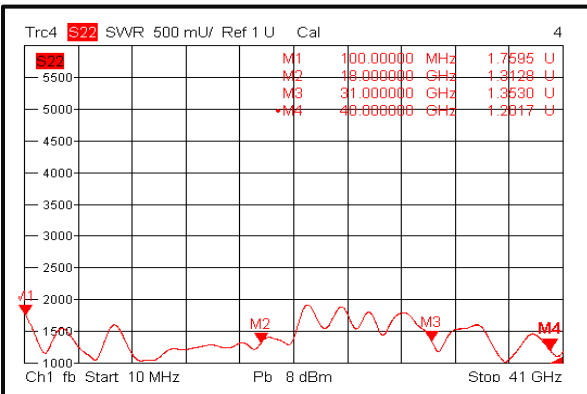
Insertion Loss @+25°C



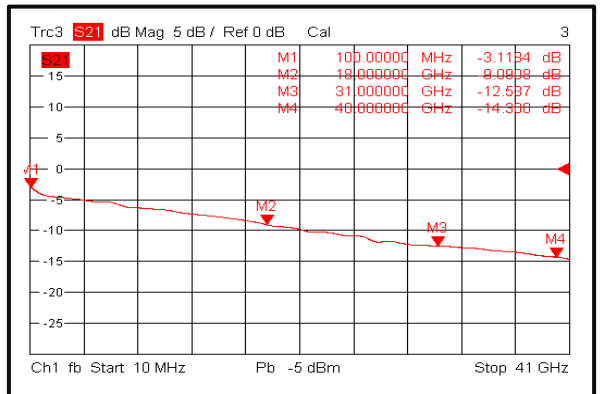
Input VSWR @+25°C



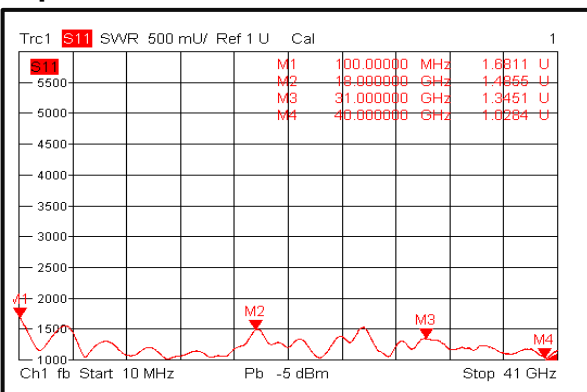
Output VSWR @+25°C



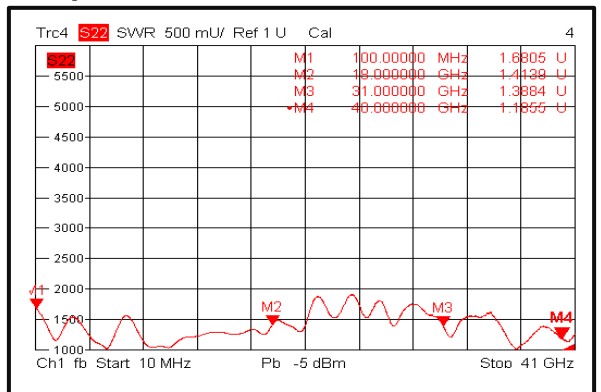
Insertion Loss @-40°C



Input VSWR @-40°C

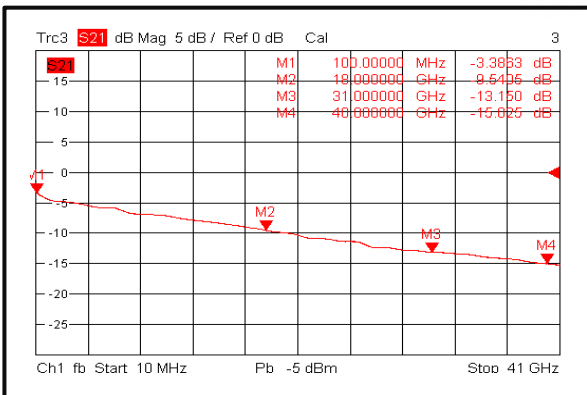


Output VSWR @-40°C

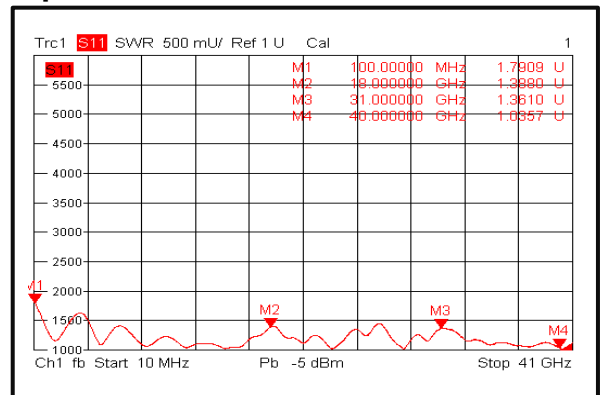




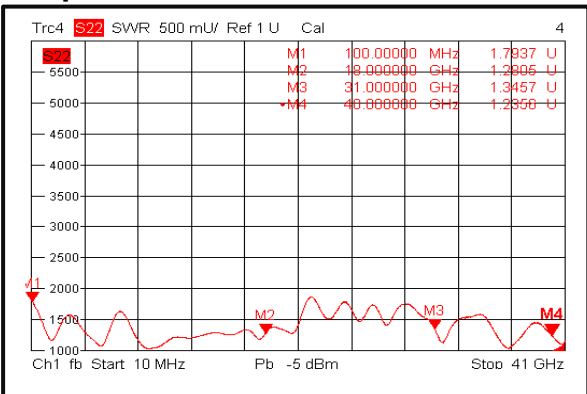
Insertion Loss @+85°C



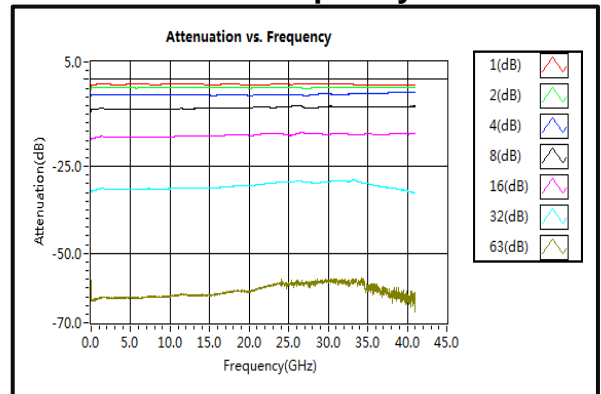
Input VSWR @+85°C



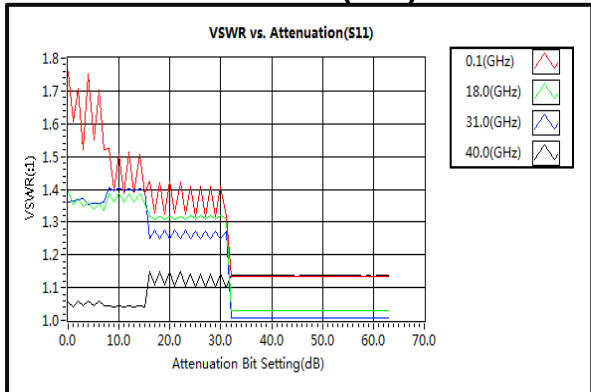
Output VSWR @+85°C



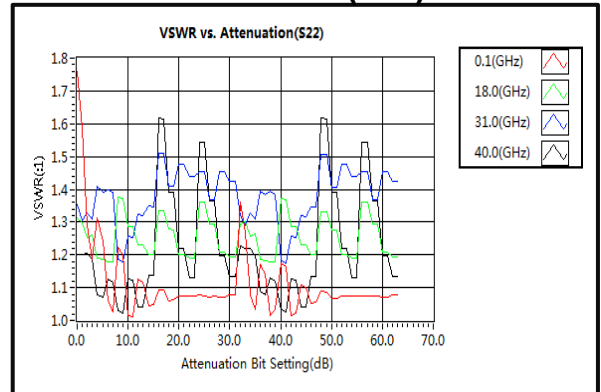
Attenuation vs. Frequency



VSWR vs. Attenuation(S11)

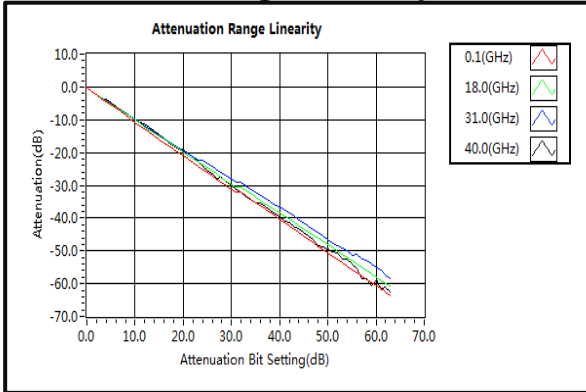


VSWR vs. Attenuation(S22)

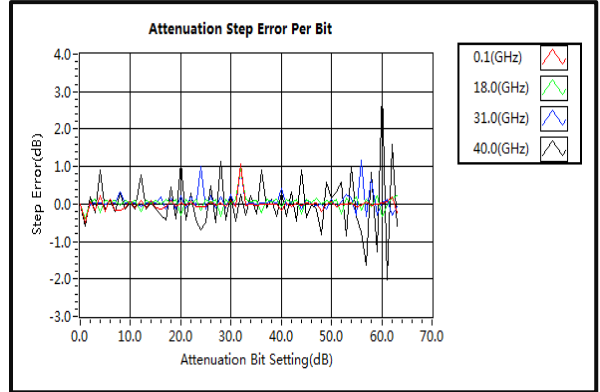




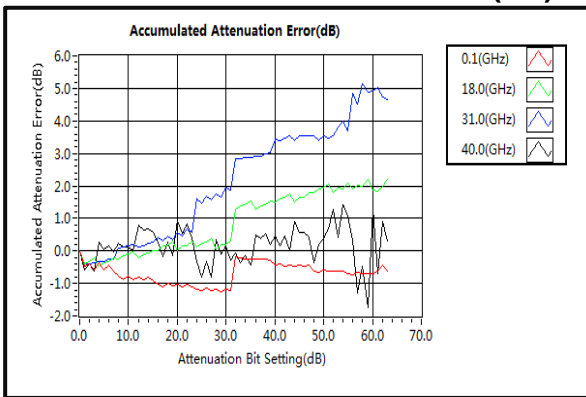
Attenuation Range Linearity



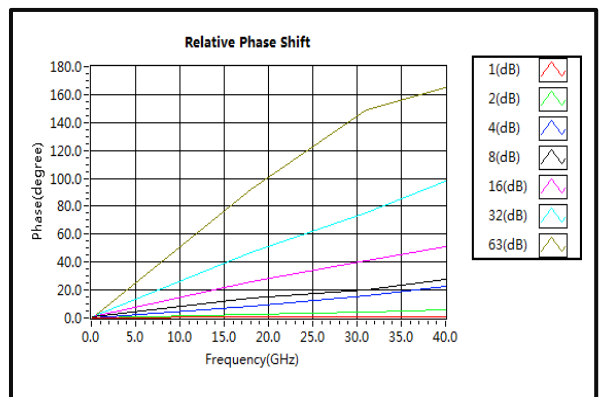
Attenuation Step Error Per Bit (dB)



Accumulated Attenuation Error (dB)



Relative Phase Shift



IIP3

