

Manual / Programmable Attenuator 11dB Range 1dB Step DC-18GHz



Features

- High Power Handling Capability
- Low VSWR
- Excellent Temperature Stability
- Manual Control (Standard)
- Programmable upon request

Typical Applications

- Wireless Infrastructure
- Military & Aerospace
- Test and Measurement

Electrical Specifications, $T_A=25^\circ\text{C}$

Parameters	Min.	Typ.	Max.	Min.	Typ.	Max.	Min.	Typ.	Max.	Units
Frequency Range	DC		8	DC		12.4	DC		18	GHz
Attenuation Value		11			11			11		dB
Attenuation Accuracy		± 1.0			± 1.0			± 1.0		dB
Attenuation Steps		1			1			1		dB
VSWR			1.6			1.6			1.75	-
Insertion Loss	0.6+(0.09/GHz)									dB
Power Handling	1W (100W Peak with 10 μ S Pulse Width)									Watts
Operating Voltage *	24									V
Control Voltage *	3.3~5V (Pulse width 50mS~1S)									V
Control Current *	0.02-0.8									mA
Operating Current *	2									A
Switching Time *	20									ms
Repeatability	0.05									dB
Working Life	10 ⁶									Cycles
Weight	Manual									ounces
	Programmable									ounces
Connectors		SMA- Female								

* Note: These specifications apply to the programmable models

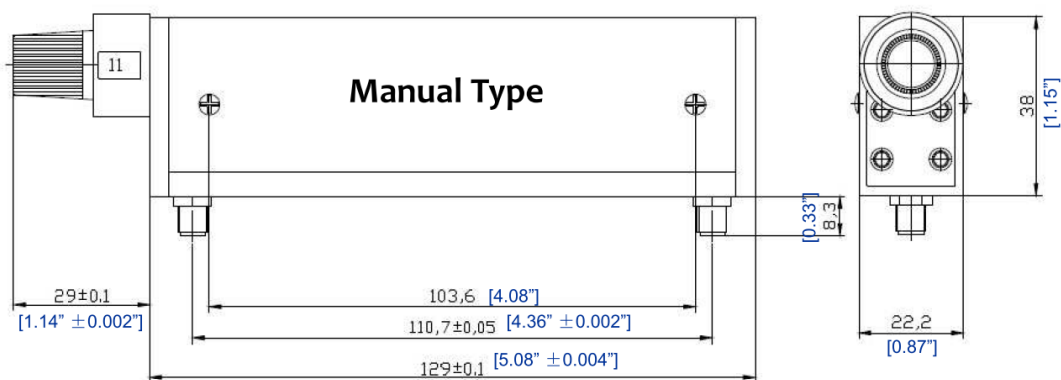
Environmental Specifications and Test Standards

Parameter	Description
Operational Temperature	-20°C~+70°C (Case Temperature)
Storage Temperature	-55°C~+85°C
Thermal Shock	-20°C → +75°C (5 Cycles / 10 hours)
Random Vibration	MIL-STD-202G Table 214-I, Test Condition Letter C 1.5 Hours Per Axis
High 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 (For Hermetically Sealed Units)

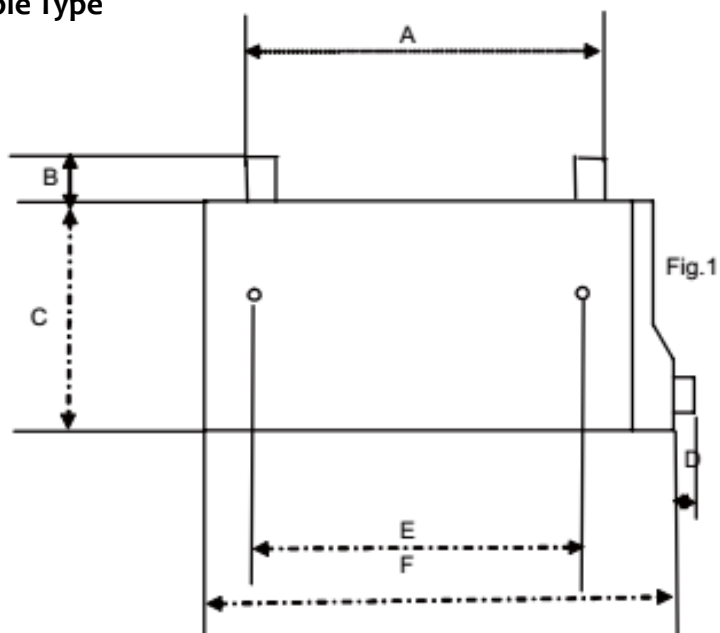
Outline Drawing:

All Dimensions in mm

Manual Type



Programmable Type

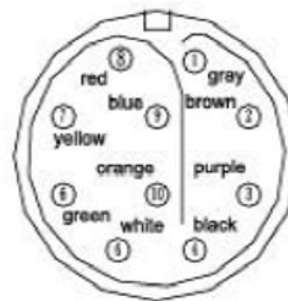
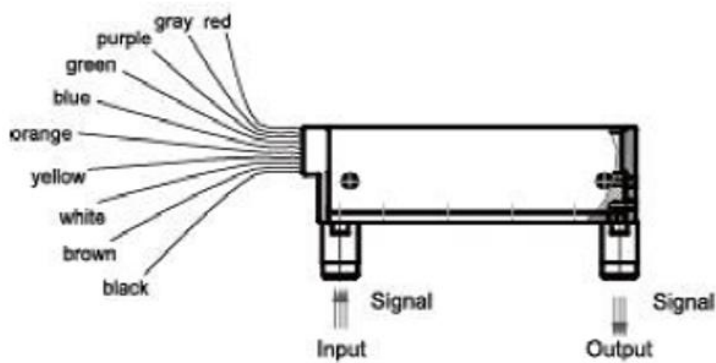


Dimensions	A	B*	C	D	E	F
Programmable	114.4	8.3	44.3	6	103.6	135.8

B*: For N type units, this dimension is 28mm

Programmable Model Options (Manual Control is Standard)

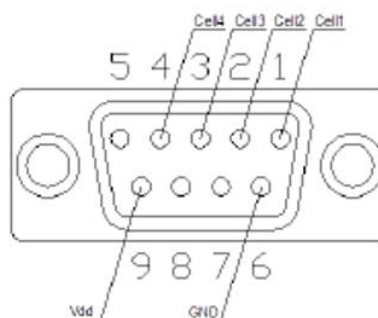
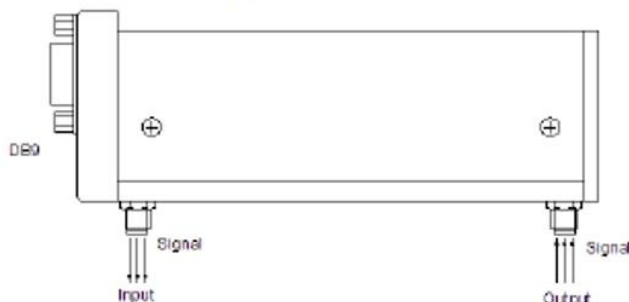
Type A – Solder Connection Option



A

Type B – DSUB Connector Option

Programmable Attenuator



B

Programmable Version Individual Cell Attenuation Values

Value	Cell 1	Cell 2	Cell 3	Cell 4
11dB Range	1dB	4dB	2dB	4dB

Logic High (3.3V to 5V) activates the cell

Important Notice

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