

SPECIFICATIONS
ELECTRICAL

Nominal Impedance	50 ohms
Frequency Range	
AC Coupled	From lower bandwidth limit to 1 GHz
DC Coupled	Dc to 1 GHz
Attenuation Range	0 to 79 dB in 1 dB and 10 dB steps
Port 1, Port 2 Channel Isolation	
Max Safe Input Voltage	± 100 V peak to peak, 0.1 μ s duration
Maximum Average Input Power	1.5 W to +65°C ambient, derated linearly to zero watts at 100°C
Signal Coupling	Ac, dc, and dc terminated at PORT 1/INPUT connector only
Standard Connector	BNC female
Return Loss (SWR)	See Table 3
Insertion Loss	See Table 4
Power Coefficient	
1 to 20 dB	(.003 dB/W x dB) or less, referenced at zero watts
20 to 79 dB	0.060 dB/W or less, referenced at zero watts
Temperature Coefficient	Temperature coefficients are added algebraically for combined unit and decade settings
1 to 9 dB	$[\pm .0002 \text{ dB/dB} \times ^\circ\text{C}]$ or $[\pm .0012 \text{ dB}/^\circ\text{C}]$ whichever is less, referenced at +25 °C
10 to 70 dB	$[\pm .0002 \text{ dB/dB} \times ^\circ\text{C}]$ or $[\pm .0012 \text{ dB}/^\circ\text{C}]$ whichever is less, referenced at +25 °C
Switch Life	At least 100,000 revolutions
Pulse Risetime at 0 dB	150 ps or less

TABLE 3

Return Loss (SWR)¹

10 MHz to 300 MHz	>300 MHz to 600 MHz	>600 MHz to 1 GHz
50 Ohm Termination at PORT 1/INPUT		
-30 dB or less (1.06 or less)	-25 dB or less (1.32 or less)	-20 dB or less (1.22 or less)
PORT 1/INPUT or PORT 2/OUTPUT (DC Only)		
-20 dB or less (1.22 or less)	-17 dB or less (1.32 or less)	-17 dB or less (1.32 or less)

¹+20 °C to +30 °C with 10 dB mW of power applied.

TABLE 4

Attenuation Accuracy (+20°C to +30°C)

Incremental Insertion Loss Referenced to: Zero Insertion [$= -(0.50 \text{ dB} + 0.14 \text{ dB/100 MHz})$ or Better]		
Attenuator Switch Setting ¹ (dB)	Maximum Deviation from 10 MHz Offset (dB) [Offset at 10 MHz = $\pm (0.200 \text{ dB} + 0.008 \text{ dB/dB Setting})$ or Better]	
	10 MHz to 500 MHz	>500 MHz to 1 GHz
-1 to -9	+0.1 to -0.2	+0.1 to -0.5
-10	+0.1 to -0.2	+0.3 to -0.3
-20	+0.3 to -0.2	+0.3 to -0.3
-30	+0.4 to -0.2	+0.3 to -0.3
-40	+0.4 to -0.2	+0.4 to -0.2
-50	+0.7 to -0.2	+0.8 to -0.2
-60	+0.7 to -0.2	+0.8 to -0.2
-70	+0.9 to -0.2	+0.9 to -0.2

¹With any combination of attenuator switch settings, the maximum deviation from 10 MHz offset is added algebraically.

ENVIRONMENTAL

Temperature

Operating	0°C to +65°C ambient
Non-Operating	-55°C to +75°C

Altitude

Operating	To 20,000 feet
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Vibration	0.25 inches double amplitude frequency swept at 20-55-20 Hz for 1 hour
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Shock	2 shocks 60 g, 11 ms per face or 1 shock 500 g, 1 ns per face
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Humidity	Meets MIL-STD-202C Method 106 B
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Dimensions	2.5 (6.4cm) H, 4.5 (11.4cm) W, 7.4 (18.8cm) L.
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Net Weight	2-3/8 lbs. (1.08 kg)
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