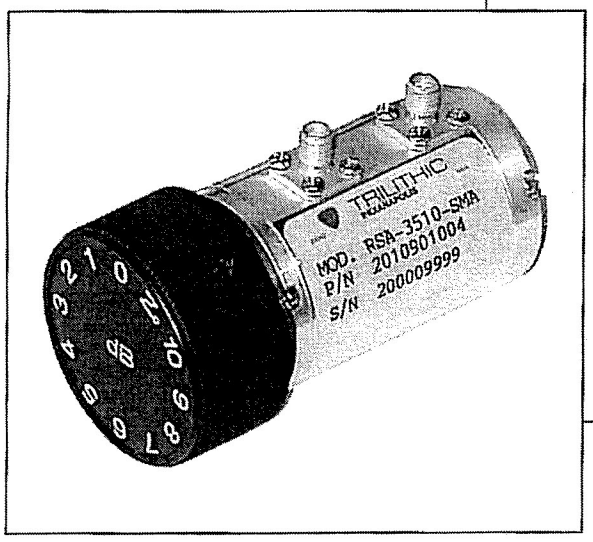
Rotary Step Attenuators

TRILITHIC



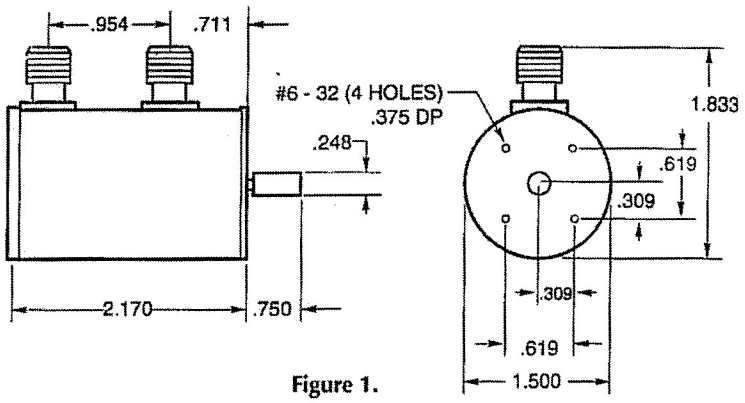


Figure 1.

Trilithic's RA series rotary attenuators are recognized worldwide as the standard for durable, precise signal level control. The series is divided into both 50 and 75 ohm units with attenuation as high as 120 dB dynamic range (in 10 dB steps) on the RA-120; or as low as 1 dB range (in 0.1 dB steps) on the RA-53 and RA-73. A firm, snap action detent locks in the desired attenuation as indicated on the supplied control knob. Low VSWR and insertion loss is assured throughout the range of each unit with tightly controlled pad values and machining tolerances. A broad selection of standard connectors is offered for various applications and includes BNC as standard, plus N, SMA, TNC, or F types.

Specifications	RSA-5310*	RA-50*	RA-70*	RA-51*
Frequency Range	DC-3 GHz	DC-2 GHz	DC-1 GHz	DC-2 GHz
dB Value	1–10 by 1 dB	0 to 10 by 1 dB	0 to 10 by 1 dB	0 to 70 by 10 dB
Connectors	SMA	BNC, N, SMA, TNC	BNC, N, TNC, F	BNC, N, SMA, TNC
Impedance	50 Ohms	50 Ohms	75 Ohms	50 Ohms
VSWR	1.5:1 max.	1.2:1 to 1 GHz 1.3:1 to 1.5 GHz 1.5:1 to 2 GHz	1.3:1 to 1 GHz	1.2:1 to 0.5 GHz 1.3:1 to 1 GHz 1.5:1 to 1.5 GHz
Accuracy	1–10 dB ±0.5 dB	±0.1 dB to 0.03 GHz ±0.2 dB to 0.5 GHz ±0.25 dB to 1 GHz ±0.5 dB to 2 GHz	±0.1 dB to 0.03 GHz ±0.2 dB to 0.5 GHz ±0.3 dB to 1 GHz	±0.2 dB to 0.03 GHz ±0.5 dB to 0.5 GHz ±1 dB to 1 GHz ±1 dB or 2% to 1.5 GHz
Insertion Loss	0.5 dB @ 3 GHz	0.1 dB max. to 0.5 GHz 0.3 dB max. to 1 GHz 0.5 dB max. to 2 GHz	0.1 dB max. to 0.5 GHz 0.3 dB max. to 1 GHz 0.4 dB max. to 2 GHz	0.1 dB max. to 0.5 GHz 0.3 dB max. to 1 GHz 0.4 dB max. to 2 GHz
Temperature	-20° to +150°F	-20° to +125°C	-20° to +125°C	-20° to +125°C
Average Power	2 Watts (25°C)	1 Watt (25°C)	1 Watt (25°C)	0.5 Watt (25°C)
Peak Power	100 Watts pulse	750 Watts, 3μSec. pulse	750 Watts, 3μSec. pulse	750 Watts, 3μSec. pulse
Rotation	30 degrees	30 degrees	30 degrees	45 degrees
Weight	7 ounces	10 ounces	10 ounces	12 ounces
Housing	Irridited Aluminum	Irridited Aluminum	Irridited Aluminum	Irridited Aluminum
Dimensions	See Figure 1	See Figure 2	See Figure 2	See Figure 3