High Power Variable Attenuator, 3kW, CPR284

Model GA1117 is a waveguide variable attenuator designed for high power industrial heating applications. High power variable attenuators are useful where process stability is compromised by inherent operating characteristics and limitations of commercially available microwave generators. Process performance can be enhanced by allowing the microwave generator to remain in a steady state operating condition while using the variable attenuator to control microwave power delivered to the process load.

The GA1117 is a hybrid variable attenuator consisting of a 3-port circulator, adjustable tuning stub and dummy load. Generated microwave power entering port 1 is initially delivered to the dummy load. Adjusting the tuning stub into the waveguide causes a percentage of power to be reflected back to the circulator where it is then directed out port 2 and to the process load.

Construction of the GA1117 is all aluminum waveguide. Corrosion due to harsh cooling water supplies is minimized using all copper water lines and brass fittings.

**General Specifications:**
- Frequency: 2450 MHz nominal
- Input Power: 3 kW continuous max.
- Waveguide: WR284 (RG75/U)
- Flanges: CPR284 (UG1725/U) with 1/4-20 UNC tapped holes
- Input VSWR: 1.1 max. (Port 1)
- Attenuation: 20-99%
- Water Connections: 1/8 NPT female threads
- Water Flow: 0.5 gpm min., 70 psi max. inlet pressure, 50°C max. inlet temp
- Construction: Dip brazed aluminum, brass water connections
- Finish: Clear chemical film

**Options:**
- Flange interlock switches (either flange)
- Flange mounting studs

**Accessories:**
- GA2403 Flange Adapter (Q-D style)

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