The model GA1119 is a waveguide 3-port circulator designed for high power industrial heating applications requiring high reliability and rugged construction. These circulators are most often used with dummy loads in an isolator configuration for magnetron protection, but they are also useful for other purposes in conjunction with devices such as phase shifters and variable attenuators.

Construction of the GA1119 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: 10 kW continuous max. (fwd and rev)
- Waveguide: WR340 (RG113/U)
- Flanges: WR340 (UG1713/U) with M6 tapped holes
- Input VSWR: 1.2 max. (Port 1)
- Insertion Loss: 0.20 dB max. (Port 1 to Port 2)
- Isolation: 20 dB min. (Port 2 to Port 1)
- Water Connections: 3/8 NPT female threads
- Water Flow: 0.5 gpm min., 125 psi max. inlet pressure, 50°C max. inlet temp
- Construction: Aluminum body, brass water connections
- Finish: Waveguide: Clear chemical film, Copper/brass/steel Nickel plate

**Options:**
- Flange interlock switch (any flange)
- Flange mounting studs