

**GPHS1616DS-8.5-9.7G****Applications**

- Radar Systems                      • Military                                      • R&D Labs
- Telecom Infrastructure      • Communication Systems • Wireless Radio Systems
- Microwave Radio Systems

**Description**

Goghel carries a broad selection of circulators to fit your needs. These unique devices allow two different direction signals to share the same channel. The classic use of this three port device is for routing signals between an antenna and a transceiver, allowing the receive signal to enter from the antenna (port 1) and exit to the receiver (port 2) while the transmit signal enters from the transmitter (port 3) and exits to the antenna (port 1).

The circulator can also be used as an isolator by placing a matched load into one of the ports. These components can be used in antenna transmitting and receiving, radar, amplifier systems and any application that requires isolation from a signal reflection and the ability to send signals in opposite directions down a single channel. These circulators feature excellent insertion loss, high isolation and reliability.

The **GPHS1616DS-8.5-9.7G** is a single junction circulator that operates from 8.5 to 9.7GHz and can handle up to 300 Watts (CW) in the forward direction. The drop in Tab uses Soldering Tab on all ports and has electrical specifications of 1.2:1 max VSWR, 20dB min isolation and 0.3 dB max insertion loss. The package is RoHS compliant.

**Electrical Specifications**

| Description        | Minimum | Typical | Maximum | Units |
|--------------------|---------|---------|---------|-------|
| Frequency Range    | 8.5     |         | 9.7     | GHz   |
| Isolation          |         |         | 20      | dB    |
| Insertion Loss     |         |         | 0.3     | dB    |
| VSWR               |         |         | 1.2: 1  |       |
| Forward Power, CW  |         | 300     |         | Watts |
| Reverser Power, CW | /       | /       | /       | Watts |
| Impedance          |         | 50      |         | Ohms  |
| Operating Temp     | -50     |         | 85      | °C    |

**Mechanical Specifications**

## Size

|        |                 |
|--------|-----------------|
| Length | 0.63 in[ 16mm]  |
| Width  | 0.63 in[ 16 mm] |
| Height | 0.315in[ 8 mm]  |



## Circulator Series

Weight

0.011 lbs[ 20 g]

### Configuration

|               |                 |
|---------------|-----------------|
| Design        | Single Junction |
| Package Style | Tab             |
| Connector 1   | Tab             |
| Connector 2   | Tab             |
| Connector 3   | Tab             |

### CAD Drawing

Circulator With 20dB Isolation From 8.5 GHZ to 9.7 GHz 300Watts And Tab



