

GPHS105W 3.5-3.7G**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 GPHS105W 3.5-3.7G is a single junction circulator that operates from 3.5 to 3.7 GHz and can handle up to 40 Watts (CW) in the forward direction.

The coaxial part uses SMD on all ports and has electrical specifications of 1.1:2:1 max VSWR, 20dB min isolation and 0.4 dB max insertion loss. The package is RoHS compliant.

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	3.5		3.7	GHz
Isolation			20	dB
Insertion Loss			0.4	dB
VSWR			1.2: 1	
Forward Power, CW		40		Watts
Reverser Power, CW	\	\	\	Watts
Impedance		50		Ohms
Operating Temp	-55		85	°C

Mechanical Specifications

Size

Diameter	0.394	in[10 mm]
Height	0.197	in[5 mm]

Configuration

Design	Single Junction
Package Style	SMD
Connector 1	SMD
Connector 2	SMD
Connector 3	SMD

CAD Drawing

Circulator With 20dB Isolation From 3.5GHZ to 3.7 GHz 40 Watts And SMD

