

TGG Based Polarization Independent Dual Stage 850/980/1060 Optical Circulator

(Patant pending)

Product Description

The OC Series Terbium Gallium Garnet Based 850/980/1060nm dual stage Optical Circulators are non-reciprocal devices that redirect light from port-to-port in only one direction while minimizing back reflection and back scattering in the reverse directions for any state of polarization. With Agiltron's patent pending magnetic-optics technology and proven advanced micro optics design, the dual stage circulator features low insertion loss, high isolation, broad wavelength coverage, high power handling, and high stability. Agiltron also provides customized design to meet special applications.



Performance Specifications

| OC Series TGG PI 2-S Circulator | | Min | Typical | Max | Unit |
|---------------------------------|------|-----------------------|---------|-------|------|
| Operation Wavelength | 850 | 840 | | 860 | nm |
| | 980* | 970 | | 990 | |
| | 1060 | 1050 | | 1070 | |
| Insertion Loss ¹ | | | 1.8 | 2.5 | dB |
| Wavelength Dependent Loss | | | | 0.2 | dB |
| Isolation | | 40 | 45 | 55 | dB |
| Polarization Dependent Loss | | | 0.15 | 0.25 | dB |
| Cross Talk | | 45 | 50 | | dB |
| Return Loss | | 50 | 55 | | dB |
| Optical Power Handling | | | 500 | 5000* | mW |
| Storage Temperature | | -10 | | 60 | °C |
| Fiber Type | | See order information | | | |
| Package Dimension** | | (L)114x(W)34X(H)33 | | | mm |

* Special order

**Package dimension for reference only.

1. Excluding connectors

Features

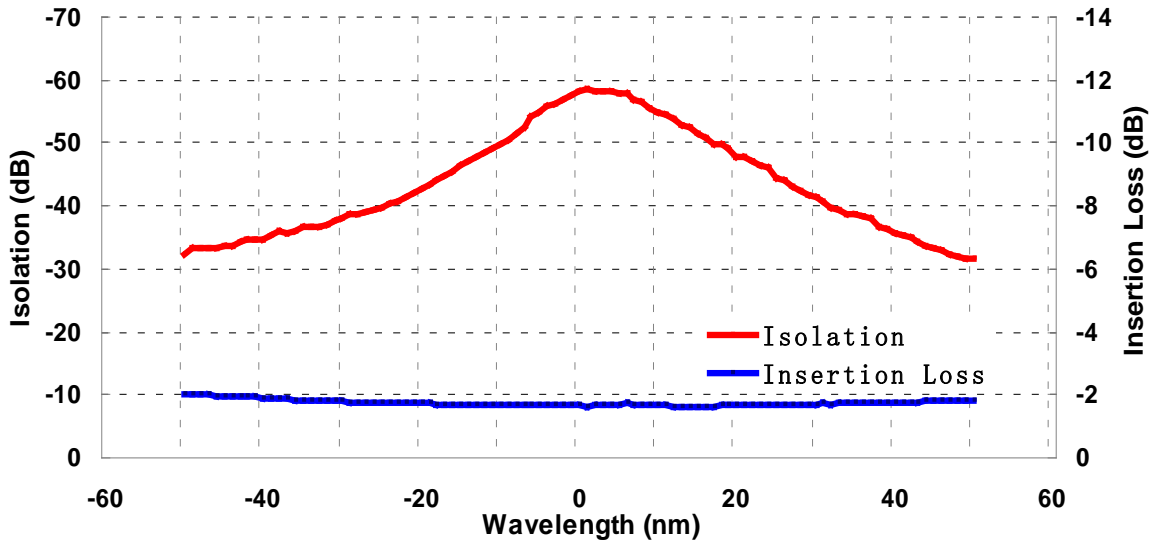
- Low Insertion Loss
- High Isolation
- Low PDL
- High Reliability & Stability
- Broad Operation Wavelength

Applications

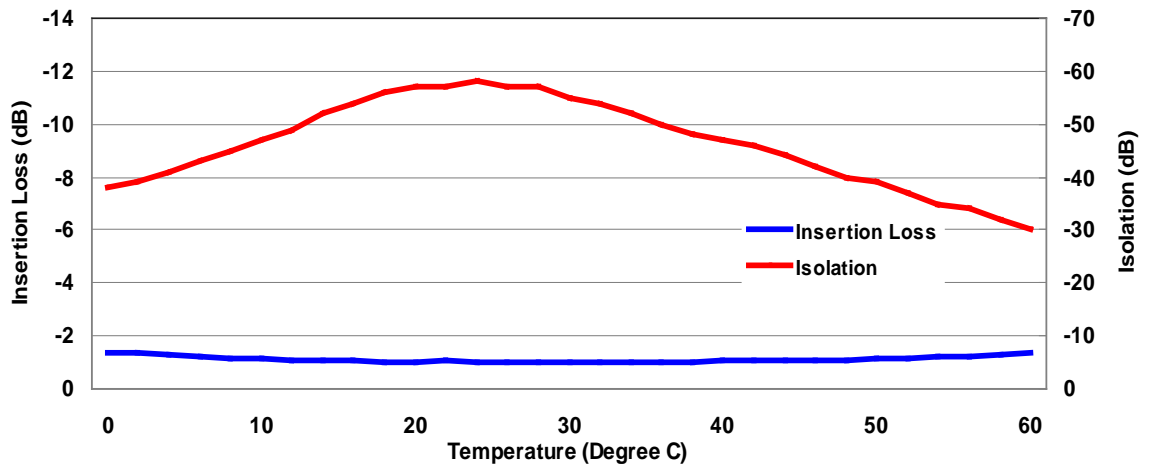
- Fiber Optic Sensor
- Test and Measurement
- Instrumentation

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Optical Performance

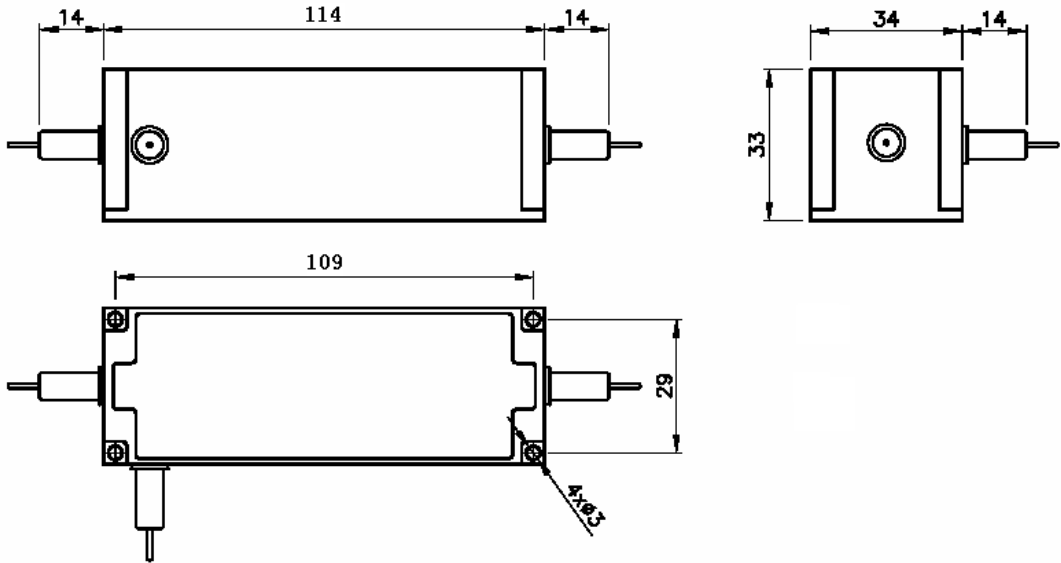


IL/ISO VS. Temp @ Center Wavelength



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Mechanical Dimensions (Unit:mm)



Ordering Information

| OCST- | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
|-------|---|---------------------------------------|--------------------------|--------------------------|--|---|--|--|
| | Type | Wavelength | Grade | Package | Fiber Type | Fiber Length | Connector | |
| | Polarization Independent=11 Special=10 | 1060=1 850=8 980=9 Special=0 | Standard=1 Special=0 | Standard=1 Special=0 | HI1060=2 HI1060 Flex=3 HI780=7 HI980=9 Special=0 | Bare fiber=1 900um Loose tube=3 Special=0 | 0.25M=1 0.5M=2 1.0M=3 Special=0 | None=1 FC/PC=2 FC/APC=3 SC/PC=4 SC/APC=5 ST/PC=6 LC=7 Special=0 |