

## Waveguide Faraday Isolator

90-140GHz/2.2dB, Insertion Loss/18dB, Isolation

Model: TLI-090140-08

The TLI-090140-08 is a waveguide faraday isolator that operates from 90 to 140 GHz. The isolator offers 18 dB minimum isolation and 2.2 dB maximum insertion loss. The input and output port configuration offers an inline structure with WR-08 waveguides and UG-387/U-M anti-cocking flanges.

### Features:

- Frequency range: 90-140GHz
- High Isolation
- Compact Form Factor
- Resistant to Stray Magnetic Fields

### Applications:

- Test Lab
- Sub-assemblies
- Test Instrumentations

### Electrical Characteristics:

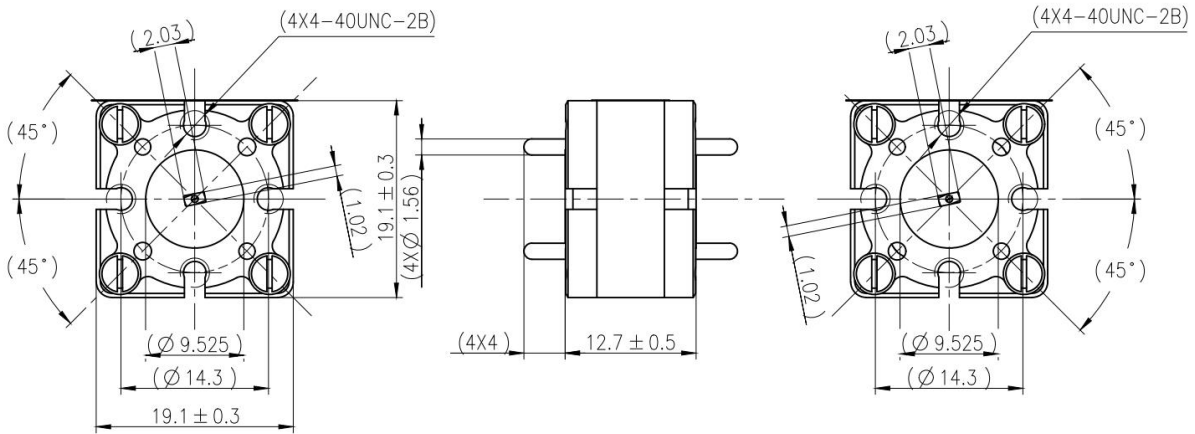
| Parameter       | Min | Typ | Max  | Units |
|-----------------|-----|-----|------|-------|
| Frequency range | 90  |     | 140  | GHz   |
| Insertion Loss  |     |     | 2.2  | dB    |
| Isolation       | 18  |     |      | dB    |
| VSWR            |     |     | 1.45 | :1    |
| Direction       |     | 1→2 |      |       |

### Mechanical Specifications:

| Parameter               | Value          | Units |
|-------------------------|----------------|-------|
| Operating Temperature   | 25             | °C    |
| Input /Output Connector | WR-08/UG-387/U |       |

## Outline Drawing:

Unit:mm; Tolerance:±0.1mm



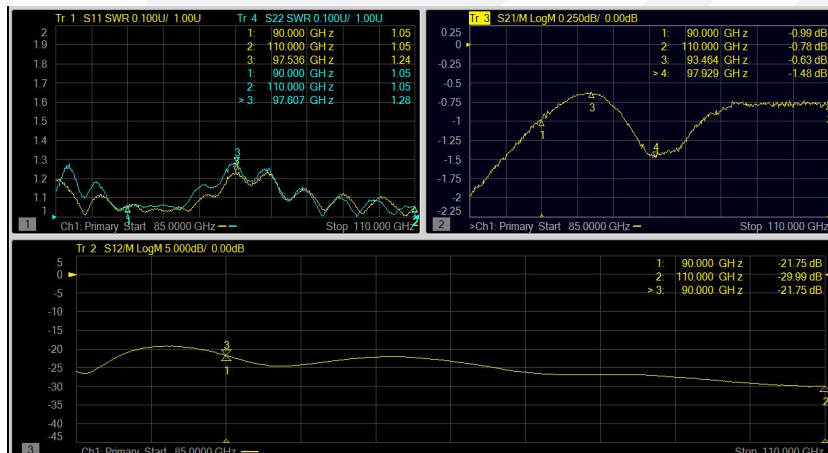
ESD Protection: Strictly adhere to ESD precautions to prevent electrostatic damage.

## Ordering Information:

| Base Number   | Description                                                                           | Revision |
|---------------|---------------------------------------------------------------------------------------|----------|
| TLI-090140-08 | Waveguide Faraday Isolator, 90-140GHz,<br>Insertion loss: 2.2dB, Port Isolation: 18dB | Rev.1.0  |

## Typical Performance Data:

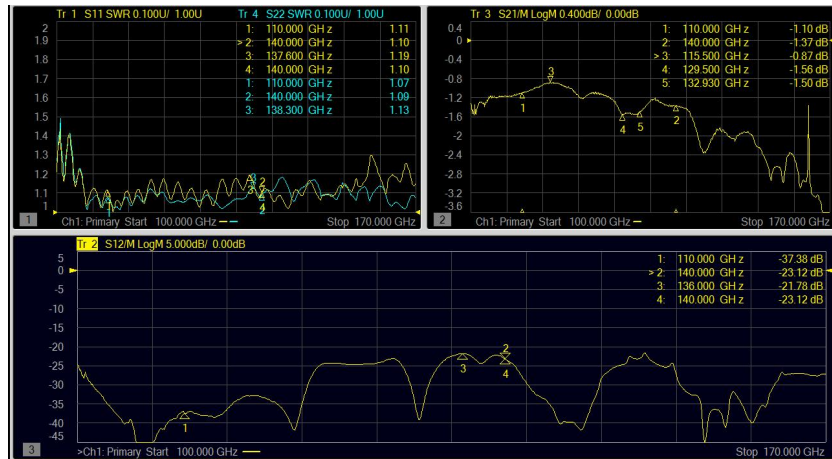
### VSWR&Insertion Loss&Isolation vs Frequency



Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

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