STF-28-S1-C

Ka-Band, Compact Faraday Isolator

STF-28-S1-C is a WR-28 Faraday isolator that operates from 26.5 to 40 GHz. The Faraday isolator is constructed with a longitudinal, magnetized ferrite rod that causes a Faraday rotation of the incoming RF signal. The compact, robust package is highly ideal for system integration and subassemblies where space is at a premium and allows for backside access for waveguide screws. The isolator offers 30 dB typical isolation and 1.2 dB typical insertion loss. The input and output ports are WR-28 waveguides with UG-599/U compatible flanges. A 90-degree twisted version of this isolator is available under model **STF-28-91-C**.

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency Range	26.5 GHz		40 GHz
Insertion Loss		1.2 dB	
Isolation		30 dB	
Return Loss		16 dB	
Power Handling			2 W (CW)
Specification Temperature		+25 °C	
Operating Temperature	-40 °C		+85 °C

Mechanical Specifications:

Item	Specification
Waveguide Ports	WR-28
Flange	UG-599/U Compatible
Insertion Length	2.4”
Material	Aluminum
Finish	Gold Plated
Weight	2 Oz
Outline	TF-SA-C

ECCN

EAR99

FEATURES

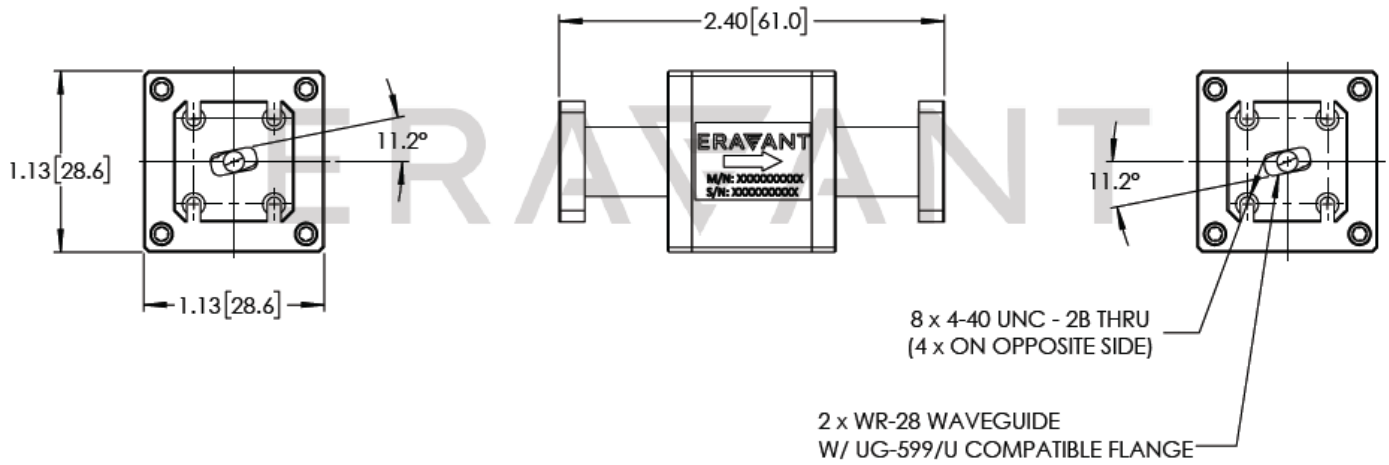
- Full Band Coverage
- Low Insertion Loss
- High Isolation
- Compact Form Factor
- Backside Flange Screw Access

APPLICATIONS

- Test Lab
- Instrumentations
- Subassemblies

SUPPLEMENTAL DETAILS

Mechanical Outline: (Unless otherwise specified, all dimensions are in inches [millimeters])



NOTE:

- **Photo presented is preliminary only and is not representative of the final product.**
- Eravant reserves the right to change the information presented without notice.

CAUTION:

- Exceeding absolute maximum ratings will damage the device.
- The device is sensitive to magnetic fields. Always keep magnet fields 6 inches away.
- Any foreign objects in the waveguide will cause performance degradation and possible device damage.