

STF-22-91

Q-Band, Faraday Isolator, 90° Twist

STF-22-91 is a WR-22 full band Faraday isolator that operates from 33 to 50 GHz. The Faraday isolator is constructed with a longitudinal, magnetized ferrite rod that causes a Faraday rotation of the incoming RF signal. The Faraday isolator offers 30 dB typical isolation and 1.2 dB typical insertion loss. The input and output ports are WR-22 waveguides with UG-383/U anti-cocking flanges and feature a 90° twist.



Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency Range	33 GHz		50 GHz
Insertion Loss		1.2 dB	
Isolation		30 dB	
Return Loss		16 dB	
Power Handling		1.5 W (CW)	2.0 W (CW)
Specification Temperature		+25 °C	
Operating Temperature	-40 °C		+85 °C

Mechanical Specifications:

Item	Specification
RF Ports	WR-22 Waveguide with UG-383/U Anti-Cocking Flange
Waveguide Flange Material	Brass
Waveguide Flange Finish	Gold Plated
Cover Material	Aluminum
Cover Finish	Black Anodized
Weight	5.0 Oz
Outline	TF-SQ-A-9

ECCN

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FEATURES

- Full Waveguide Band Operation
- Moderate Insertion Loss
- High Isolation
- Instrumentation Grade

APPLICATIONS

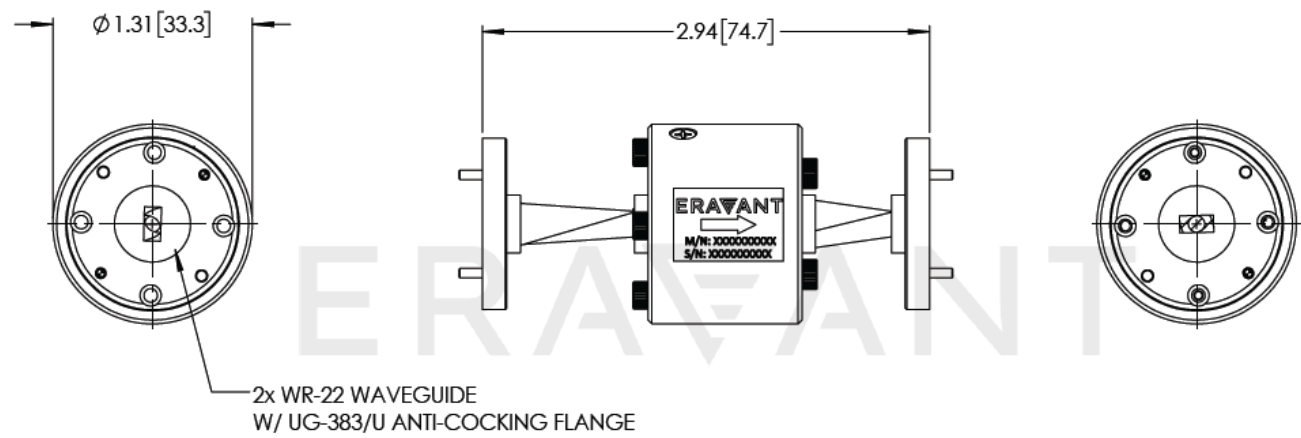
- Test Lab
- Instrumentations
- Subassemblies

SUPPLEMENTAL DETAILS



STF-22-91

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



NOTE:

- 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.