

WR-22 Waveguide Diplexer, 37.5 to 42.5 GHz and 47.2 to 52.4 GHz

SWY-40350353-22-11 is an Q-band waveguide diplexer with a low passband of 37.5 to 42.5 GHz and a high passband of 47.2 to 52.4 GHz. Since both low end and high end passband frequencies can be selected by modifying the design, custom design models are available under different model numbers.

**Electrical Specifications:**

Parameter	Minimum	Typical	Maximum
Low Passband (P1-P2)			
Passband Frequency	37.5 GHz		42.5 GHz
Passband Insertion Loss		0.3 dB	
Passband Return Loss		25 dB	
Rejection Frequency	47.2 GHz		52.4 GHz
Rejection		60 dB	
High Passband (P1-P3)			
Passband Frequency	47.2 GHz		52.4 GHz
Passband Insertion Loss		0.3 dB	
Passband Return Loss		18 dB	
Rejection Frequency	37.5 GHz		42.5 GHz
Rejection		45 dB	
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
Material	Aluminum
Weight	2.1 Oz.
Finish	Chem Film
Outline	WY-IQ-A

ECCN

EAR99

FEATURES

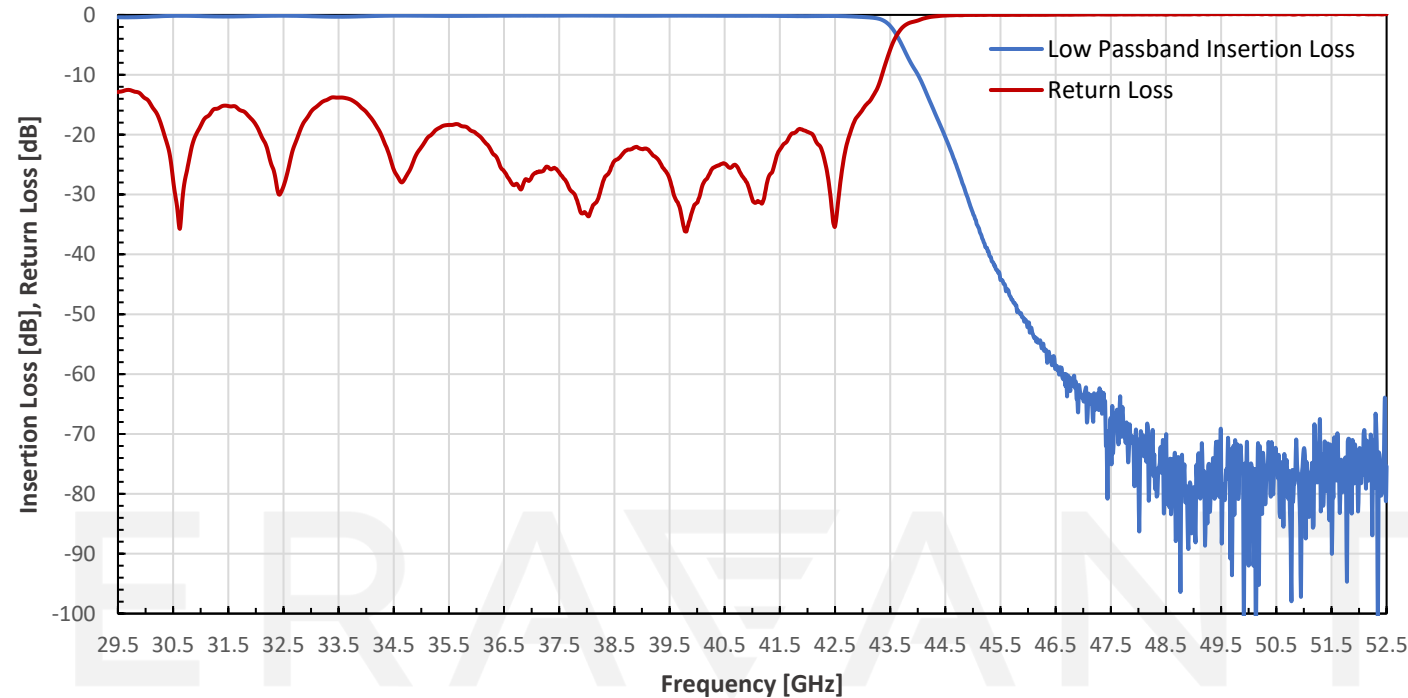
- Low Cost
- Low Insertion Loss
- High Rejection

APPLICATIONS

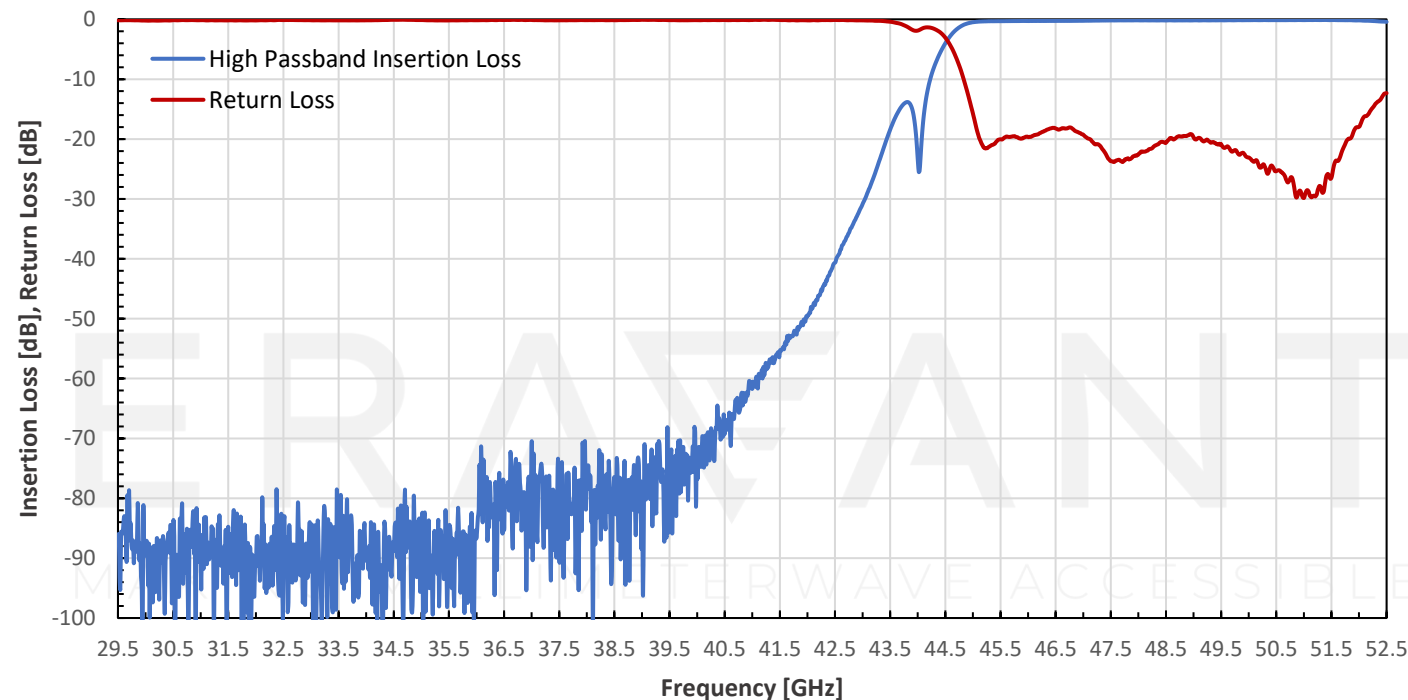
- Satellite Communication Systems
- Sub-assemblies



Typical Low Passband Performance vs. Frequency



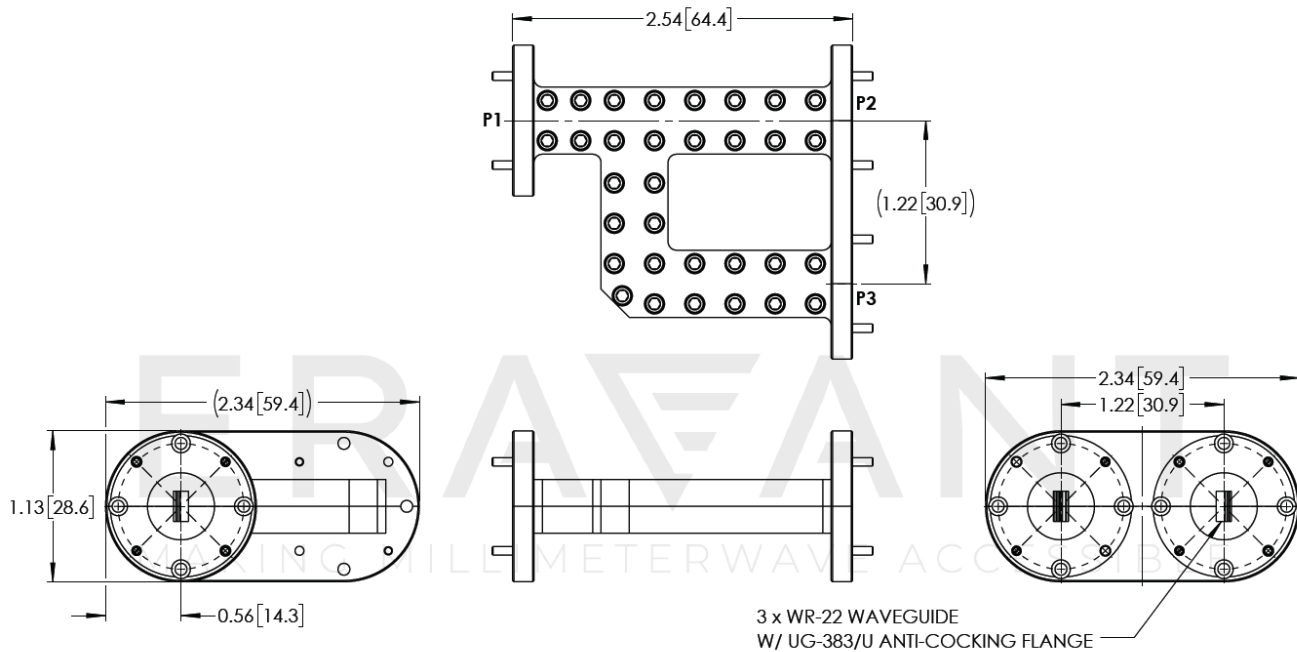
Typical High Passband Performance vs. Frequency



SWY-40350353-22-I1

Mechanical Outline:

Unless otherwise specified, all dimensions are in inches [millimeters]



NOTE:

- Eravant reserves the right to change the information presented without notice.
- All data presented is collected from a sample lot. Actual data may vary unit to unit, slightly.
- All testing was performed under +25 °C case temperature.

CAUTION:

- Any foreign objects in the waveguide will cause performance degradation and may damage or destroy the unit.