

W Band Diplexer, 79 to 87 GHz, Port Separation 50 mm

Description:

Model SWY-80386345-10-I5 is a W band waveguide diplexer with a low passband of 79 to 81 GHz and a high passband of 85 to 87 GHz. The nominal insertion loss of the diplexer is 1.0 dB and the nominal isolation is 45 dB. Since both low and high passband frequencies can be changed by modifying the design, custom designs are available under different model numbers.



Features:

- Low Cost
- Low Insertion Loss
- High Rejection

Applications:

- Communication Systems
- Sub-assemblies

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Low Passband			
Passband Frequency	79 GHz		81 GHz
Passband Insertion Loss		1.0 dB	
Rejection Frequency	85 GHz		87 GHz
Rejection	40 dB	45 dB	
Return Loss		16 dB	
Group Delay Variation			150 ps
High Passband			
Passband Frequency	85 GHz		87 GHz
Passband Insertion Loss		1.0 dB	
Rejection Frequency	79 GHz		81 GHz
Rejection	40 dB	45 dB	
Return Loss		16 dB	
Group Delay Variation			150 ps
Power Handling		25 W (CW)	
Specification Temperature		+25 °C	
Operating Temperature	-40 °C		+85 °C

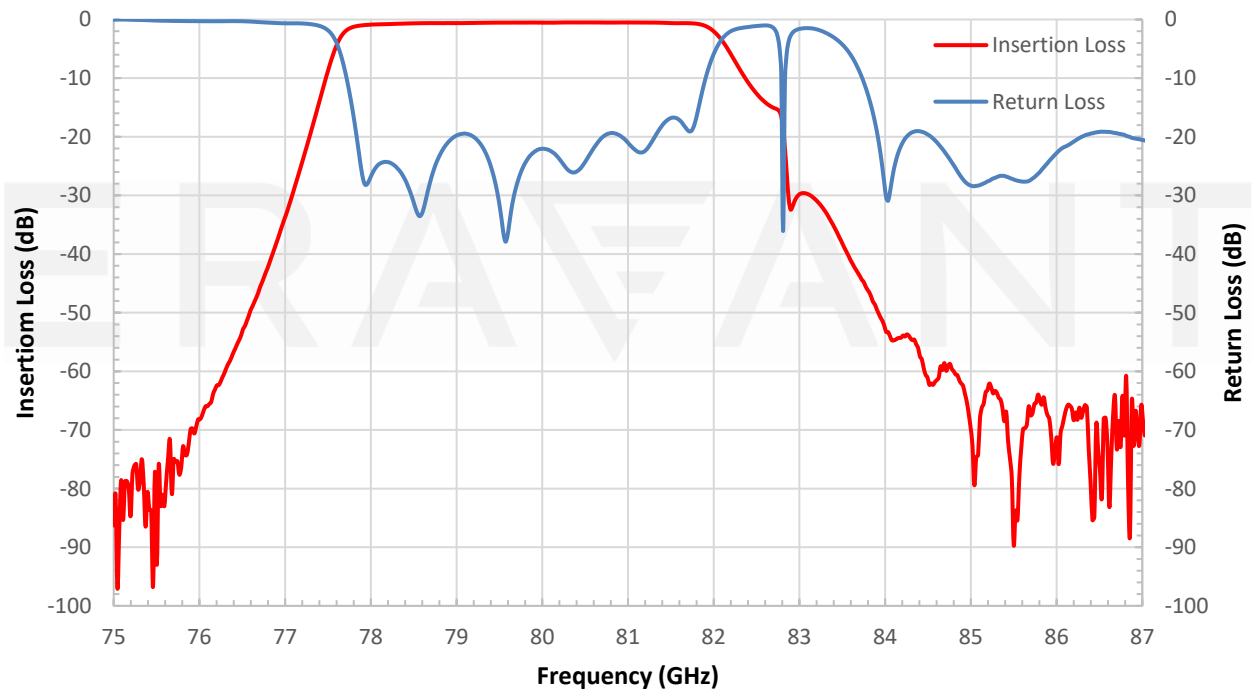
Mechanical Specifications:

Item	Specification
Waveguide Ports	WR-10 Waveguide with UG-387/U Compatible Flanges
Material	Brass
Finish	Silver Plated
Weight	3.5 Oz
Outline	WY-IW-M5

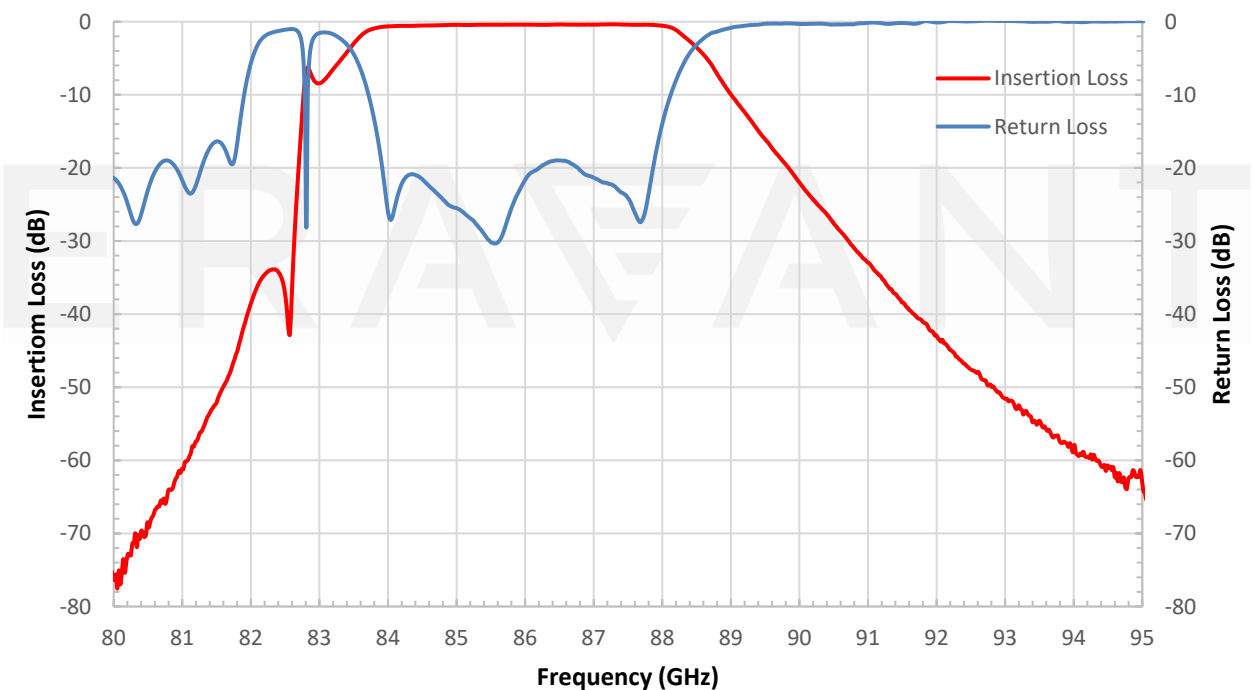


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Typical Lowpass Insertion Loss and Return Loss vs. Frequency

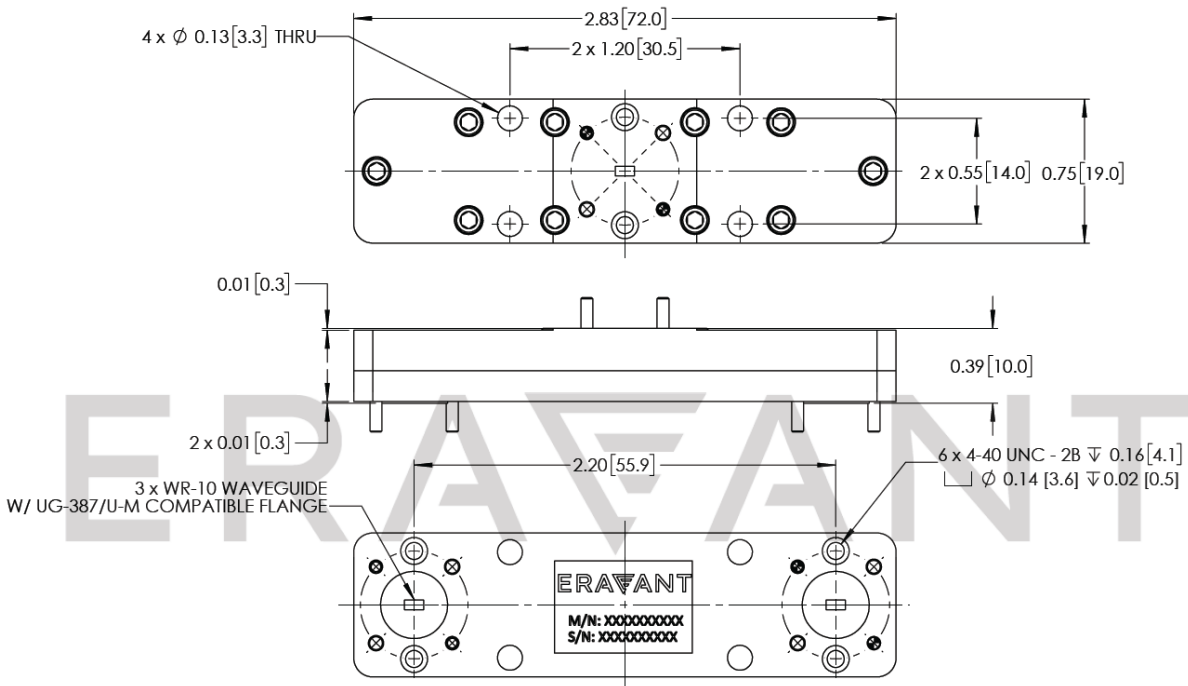


Typical Highpass Insertion Loss and Return Loss vs. Frequency



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



Note:

- 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.
- Other mechanical configurations are available under different model numbers.
- Eravant reserves the right to change the information presented without notice.

Caution:

- Any foreign objects into the waveguide will cause performance degradation and possible device damage.

