

SWP-11417404-06-E1

WR-06 Waveguide Power Divider, 4-Way Inline, 110 to 170 GHz

SWP-11417404-06-E1 is a full band WR-06, 4-way power divider that operates from 110 to 170 GHz. The power divider offers a typical insertion loss of 2.5 dB and typical isolation of 20 dB. All ports are well-balanced and in-phase for power dividing or combining applications across the band. The power divider is configured as an inline package with WR-06 waveguides and UG-387/U-M anti-cocking flanges at all ports. The input or output port orientation can be converted from a H-plane to E-plane configuration by installing Eravant's standard compact 90° twist, model **SWB-06090-TB-C**. A right angle, 4-way configuration is offered under model **SWP-11417404-06-S1**. Other power splitting options, such as 2-way, 8-way, and 16-way division, can be offered for both right-angle and inline configurations under different model numbers.



Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency	110 GHz		170 GHz
Insertion Loss		2.5 dB	
Power Unbalance		±0.8 dB	
Adjacent Port Isolation		20 dB	
Non-Adjacent Port Isolation		25 dB	
Return Loss		20 dB	
Specification Temperature		+25 °C	
Operating Temperature	-40 °C		+85 °C

Mechanical Specifications:

Item	Specification
RF Ports	WR-06 Waveguide with UG-387/U-M Compatible Anti-Cocking Flange
Material	Brass / Aluminum
Finish	Gold Plated
Weight	12 Oz
Outline	WP-D4I-A

ECCN

EAR99

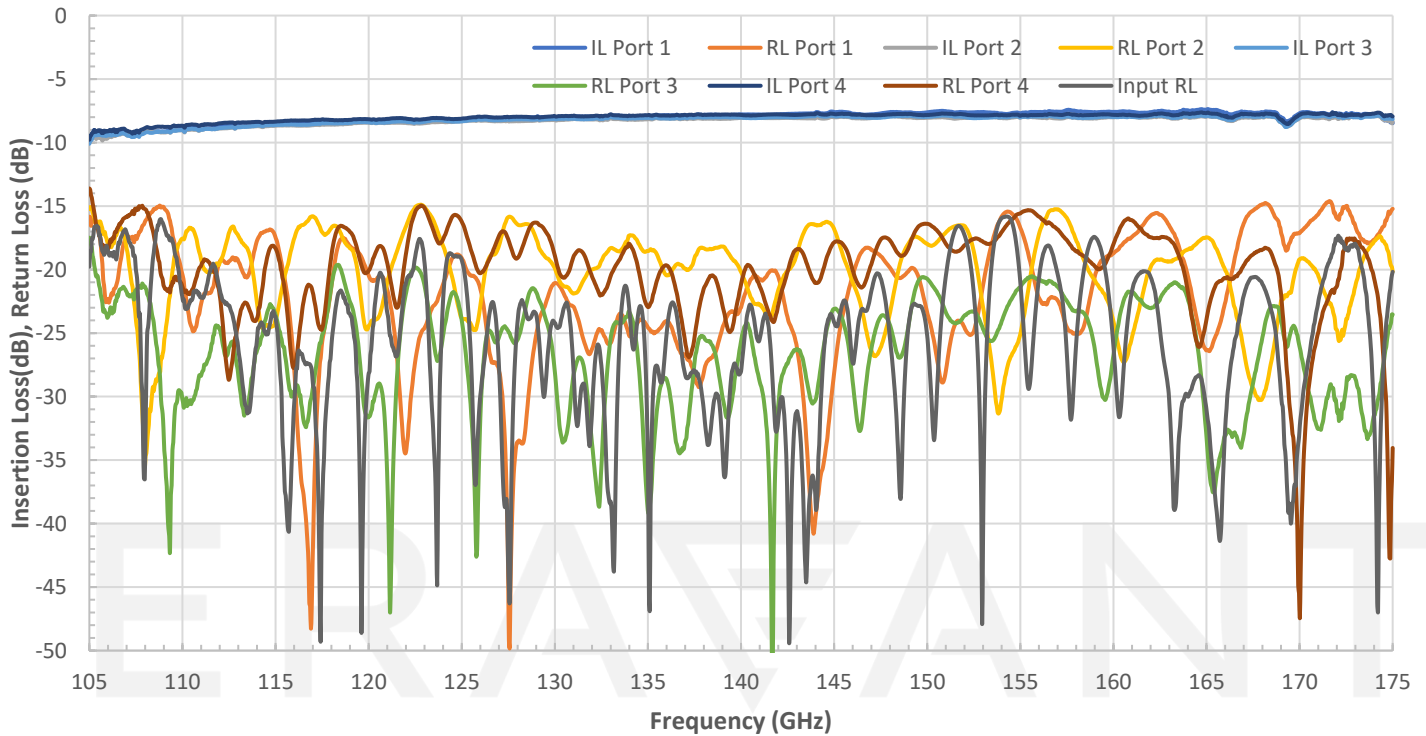
FEATURES

- Full Band Performance
- Low Insertion Loss
- High Isolation
- In-line Configuration
- Compatible with Compact Twist

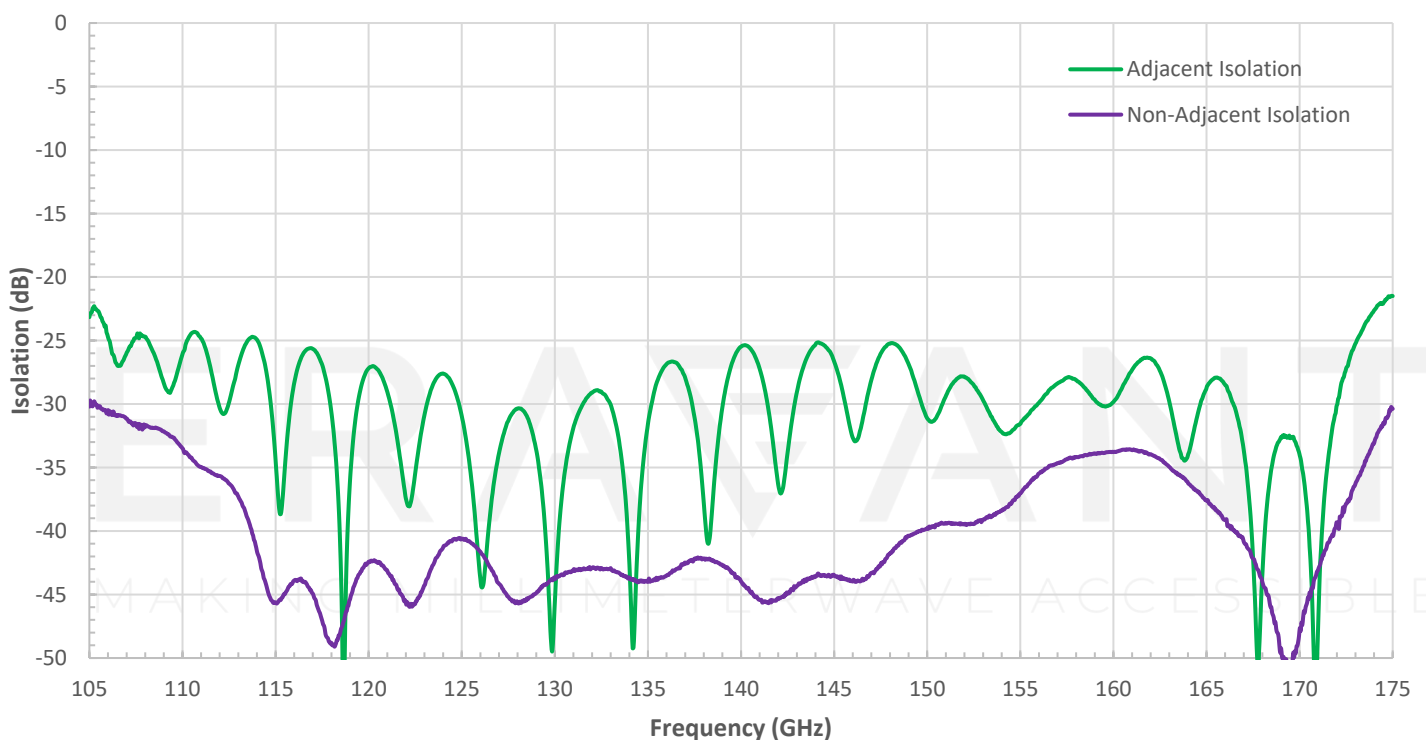
APPLICATIONS

- Testing & Measurement
- Instrumentation
- Sub-assemblies
- Power Splitting and Combining

Measured Insertion Loss and Return Loss Vs Frequency



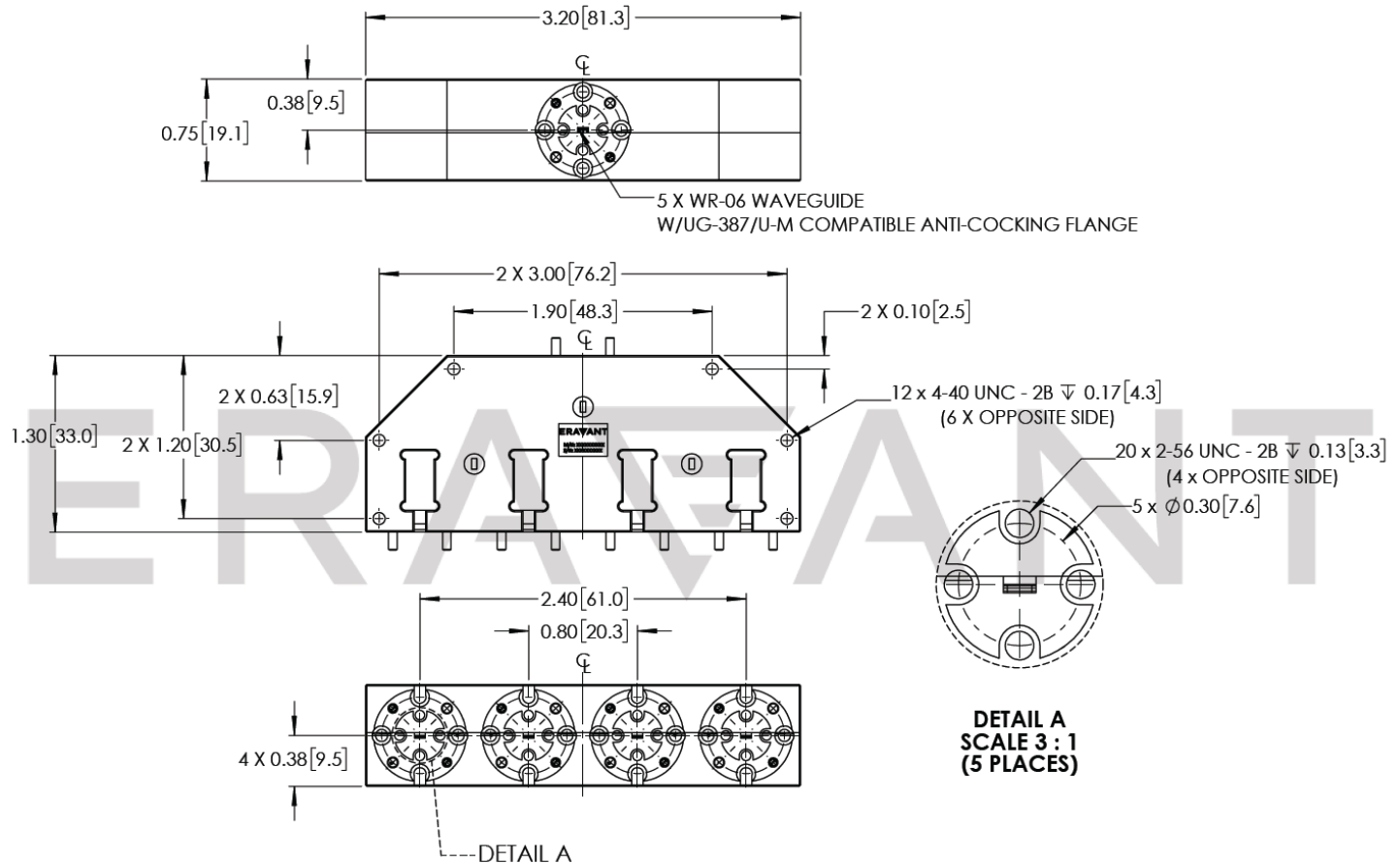
Measured Isolation Vs Frequency



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Mechanical Outline:

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



NOTE:

- The compact 90° twist, model **SWB-06090-TB-C**, is sold separately.
- Eravant reserves the right to change the information presented without notice.

CAUTION:

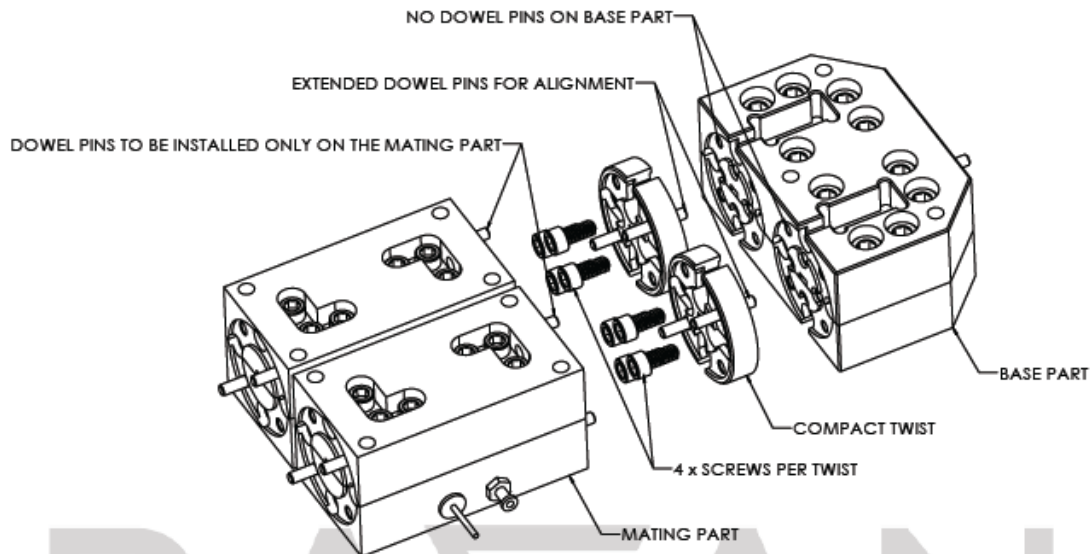
- Exceeding absolute maximum ratings shown will damage the device.
- Any foreign objects in the waveguide will degrade performance and/or damage the device.

Compact Twist Installation Diagram:

- The diagram below illustrates how to use the compact twist accessory to convert the ports on the power divider from H-plane orientation to E-plane orientation.
- There are two scenarios in which the compact twist can be used as shown below. In both cases, dowel pins cannot be installed on both the power divider and the mating part at the same time.

COMPACT TWIST INSTALLATION

OPTION 1



OPTION 2

