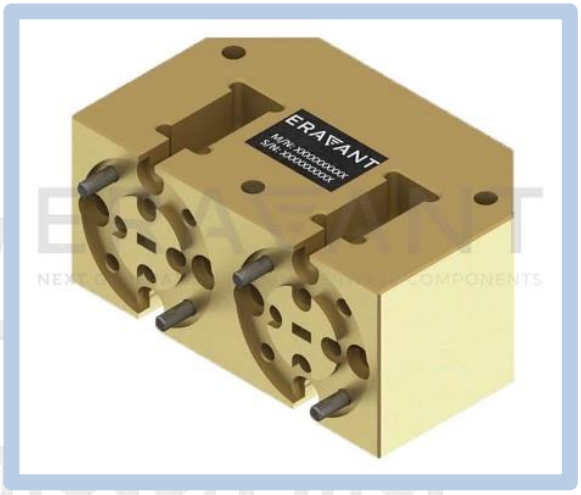
SWP-60390302-12-E1-2

Advanced

WR-12 Waveguide Power Divider, 2-Way, Inline, 60 to 90 GHz

Description:



Model SWP-60390302-12-E1-2 is a WR-12, 2-way power divider that operates from 60 to 90 GHz. The power divider offers a typical insertion loss of 0.5 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-12 waveguides and UG-387/U compatible 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-12090-TB-C**. A right angle, 2-way configuration is offered under model **SWP-60390302-12-S1**. Other power splitting options, such as 4-way, 8-way, and 16-way division, are available for both right-angle and inline configurations under different model numbers.

Features:

- Full Band Performance
- Low Insertion Loss
- High Isolation
- Compact Package

Applications:

- Test Labs
- Test Instrumentation
- Sub-assemblies
- Twist Compatible

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency	60 GHz		90 GHz
Insertion Loss		0.5 dB	
Power Unbalance		±0.3 dB	
Isolation		20 dB	
Return Loss		20 dB	
Specification Temperature		+25 °C	
Operating Temperature	-40 °C		+85 °C

Mechanical Specifications:

Item	Specification
RF Ports	WR-12 Waveguide with UG-387/U Compatible Anti-Cocking Flange
Material	Brass
Finish	Gold Plated
Weight	4.7 Oz
Outline	WP-E2I-A-2

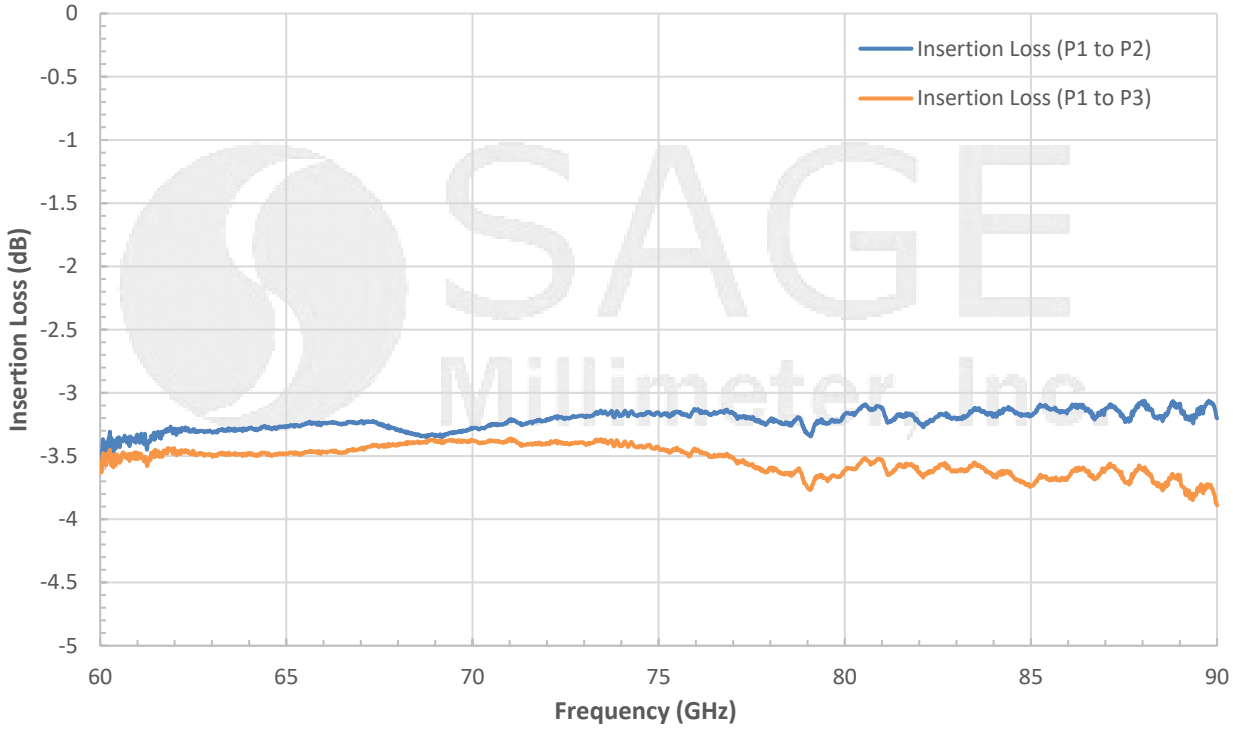
www.eravant.com | 501 Amapola Ave, Torrance, CA 90501
Phone: 424-757-0168 | Fax: 424-757-0188 | Email: sales@eravant.com

SWP-60390302-12-E1-2

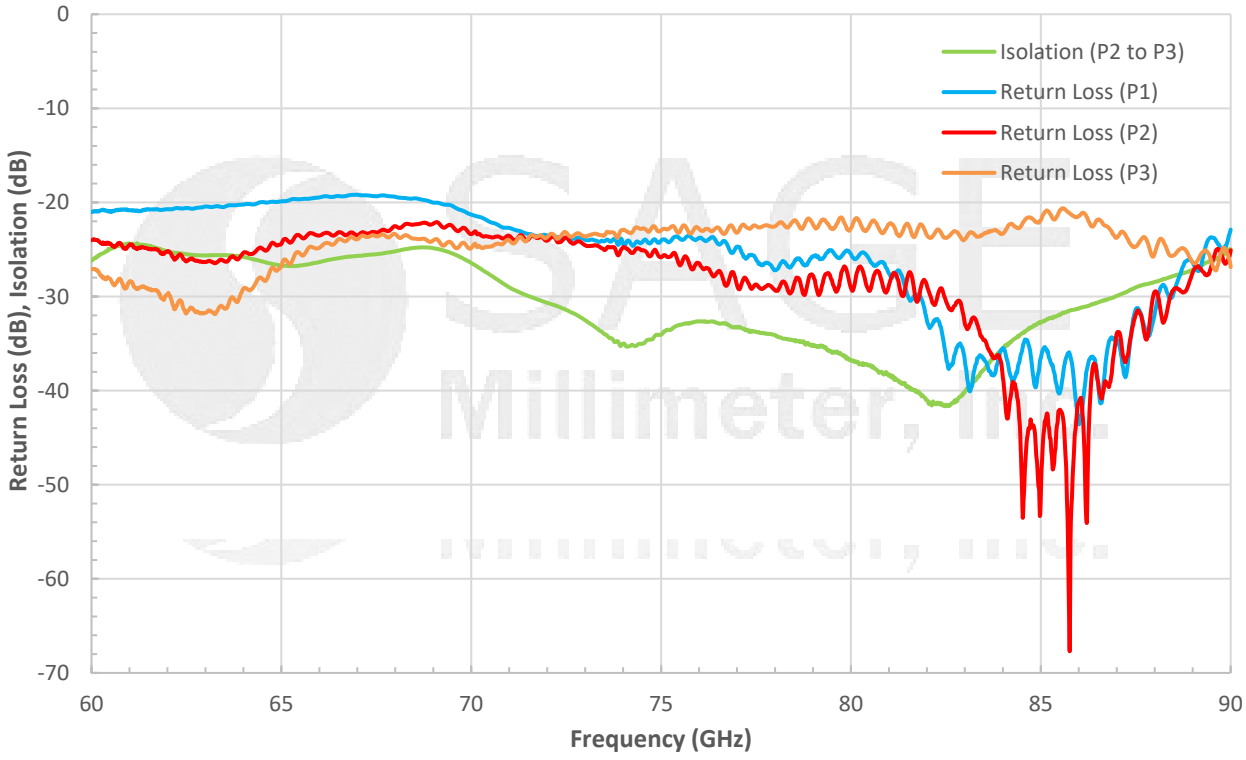
Advanced

WR-12 Waveguide Power Divider, 2-Way, Inline, 60 to 90 GHz

Typical Measured Insertion Loss Vs Frequency



Typical Measured Return Loss and Isolation Vs Frequency

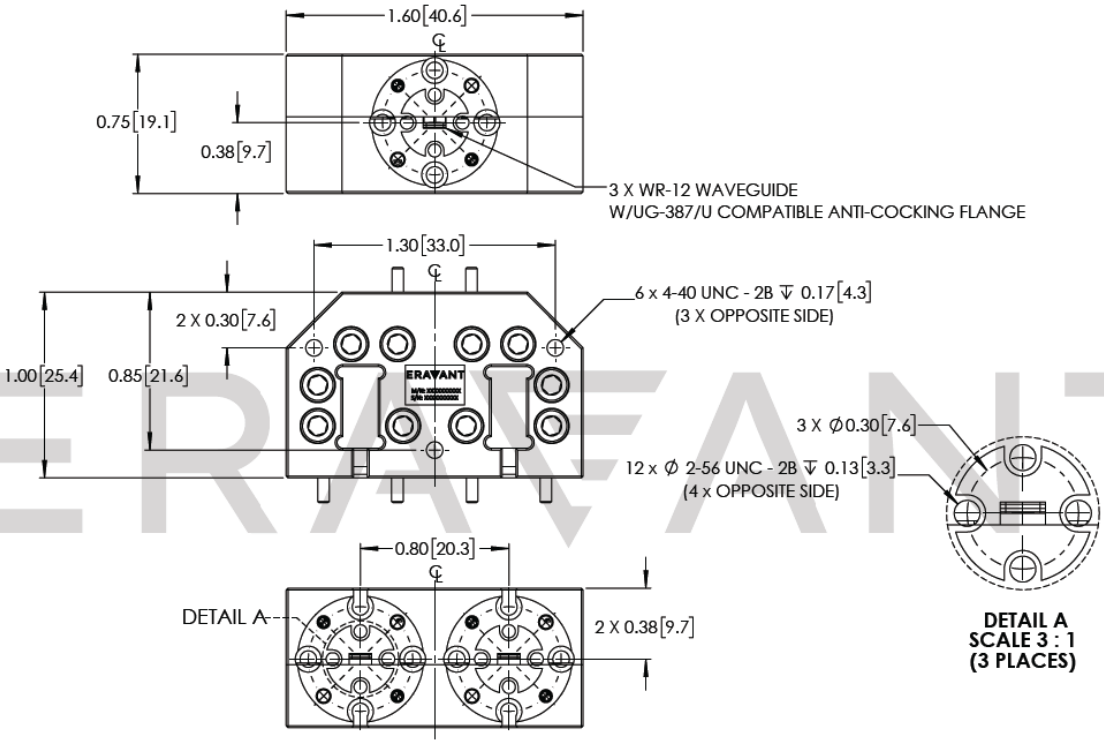


SWP-60390302-12-E1-2

Advanced

WR-12 Waveguide Power Divider, 2-Way, Inline, 60 to 90 GHz

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.
- All testing was performed under +25 ˚C case temperature.
- The compact 90˚ twist, model **SWB-12090-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.

SWP-60390302-12-E1-2

Advanced

WR-12 Waveguide Power Divider, 2-Way, Inline, 60 to 90 GHz

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.