



12WMT\_Cu WR12 Waveguide Magic Tee 60-90GHz with Four Rectangular Waveguide Interfaces

WR12 Waveguide Magic Tee Operating From 60 to 90GHz with Four Rectangular Waveguide Interfaces

### Product Information

SKU	12WMT_Cu
-----	----------

### Description

Waveguide magic tee 12WMT\_Cu, operating from 60 to 90GHz with a 0.5dB insertion loss, 40dB isolation, H-Plane VSWR 1.40:1 and E-Plane VSWR 1.60:1. 12WMT\_Cu is a four-ports hybrid coupler or power divider. All the ports have standard WR12 waveguides with the same flanges FUGP740(UG-387/U). The magic tee can be used as a power combiner or a power divider based on the given application's needs.

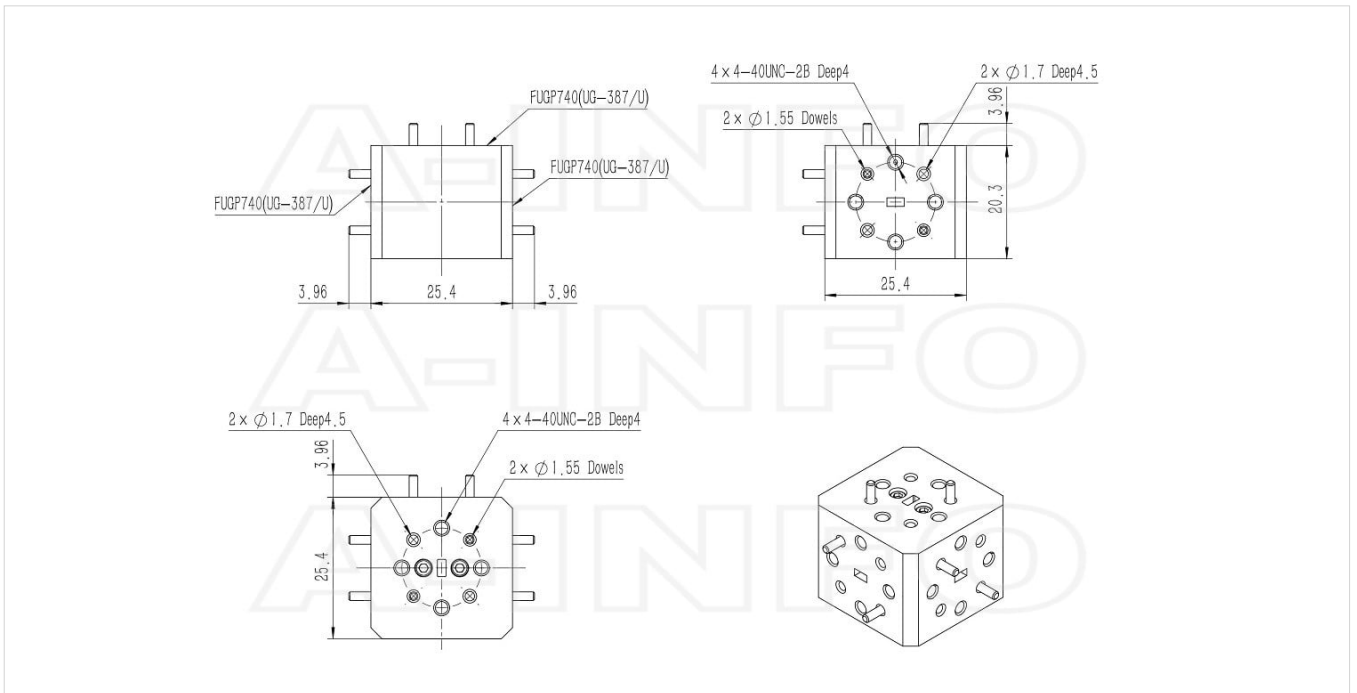
### Technical Specification

Electrical Specification		Interface	
WG Tee Type	Magic Tee	Flange 3 Style	Round
Waveguide Band	E	Flange 3 Type	Cover
Waveguide Type	Rectangular	Flange 3 Designation	FUGP740(UG-387/U)
Waveguide Size EIA WR	WR12	Flange 4 Style	Round
Frequency, Min (GHz)	60	Flange 4 Type	Cover
Frequency, Max (GHz)	90	Flange 4 Designation	FUGP740(UG-387/U)
I.L., Typ (dB)	0.5	Mechanical Specification	
I.L., Max (dB)	1	Body Material	Cu
VSWR, H-Plane, Typ	1.4	Size, L (mm)	25.4
VSWR, H-Plane, Typ	1.40:1	Size, W (mm)	25.4
VSWR, E-Plane, Typ	1.6	Size, H (mm)	20.3
VSWR, E-Plane, Typ	1.60:1	Weight, (kg)	0.1
Isolation, Min (dB)	30	Pressure Sealed	No
Isolation, Typ (dB)	40	Environmental Specification	
Power Handling, CW, (W)	8.3	Operating Temp. Low (°C)	-55
Power Handling, Peak, (KW)	4.5	Operating Temp. High (°C)	85
Interface		Storage Temp. Low (°C)	-60
Flange 1 Style	Round	Storage Temp. High (°C)	90
Flange 1 Type	Cover		
Flange 1 Designation	FUGP740(UG-387/U)		
Flange 2 Style	Round		
Flange 2 Type	Cover		
Flange 2 Designation	FUGP740(UG-387/U)		

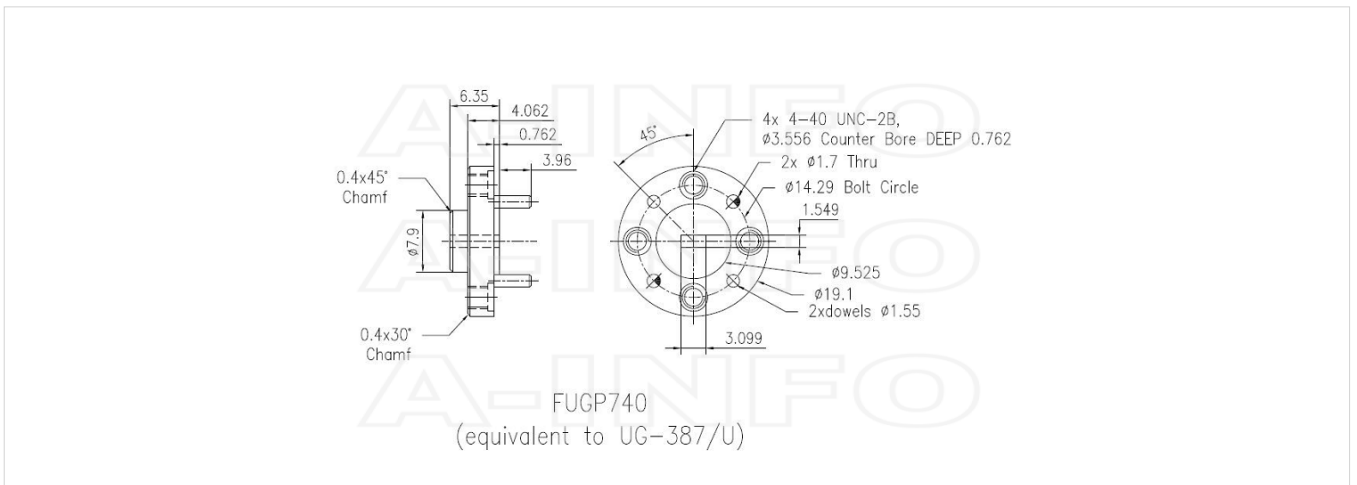
### Additional Information

Application	General Purpose Indoor & Outdoor, Fixed
-------------	---

## Outline Drawing(Size: mm)

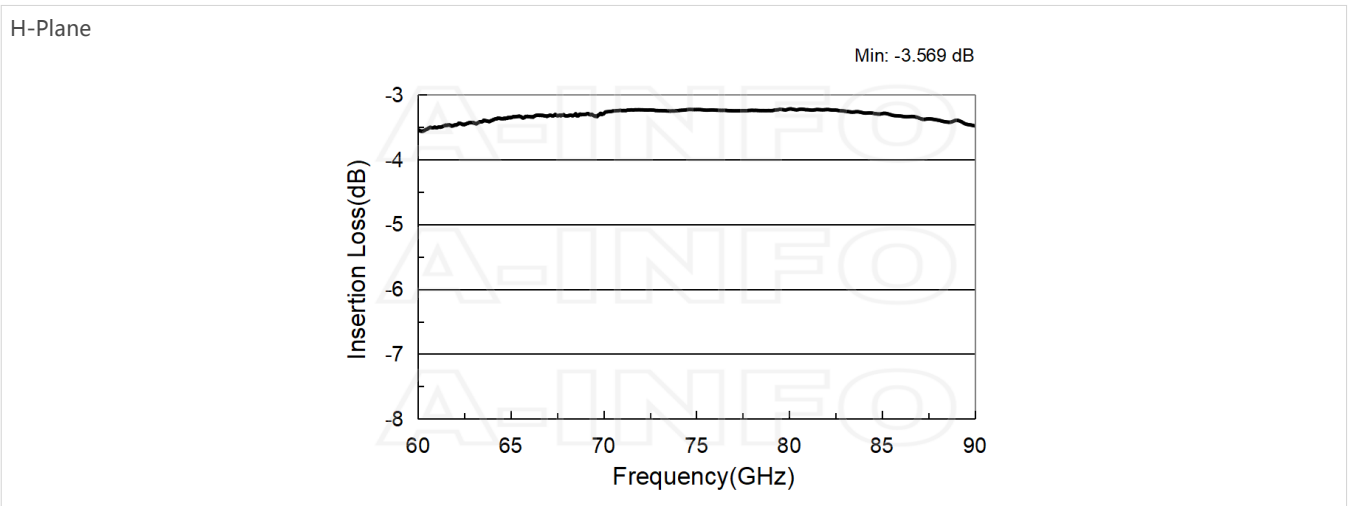
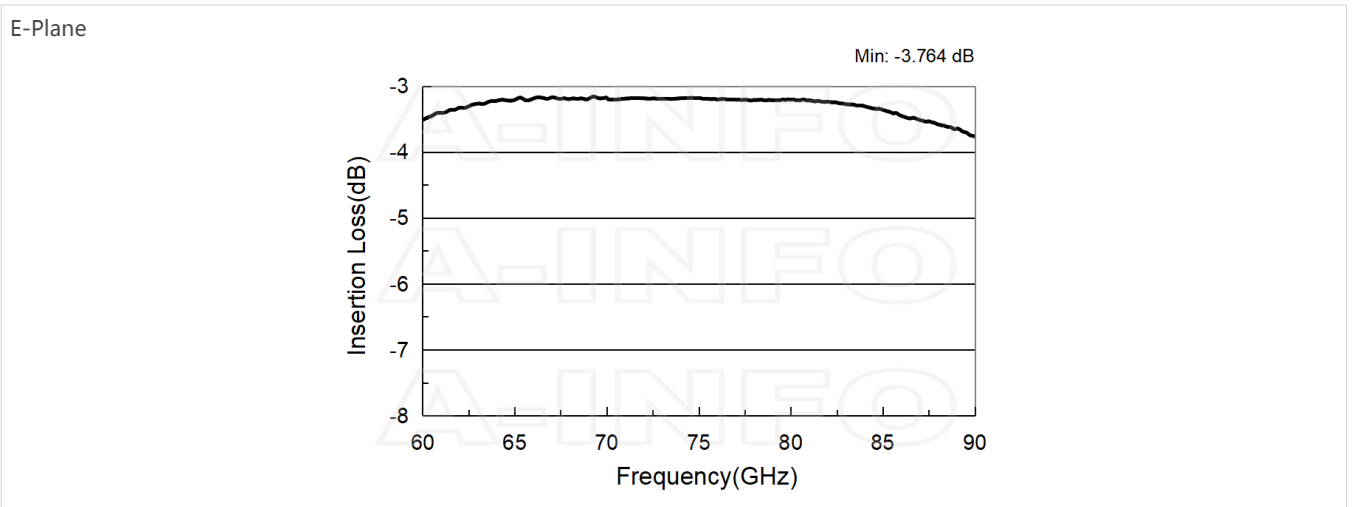


## Flange Drawing(Size: mm)

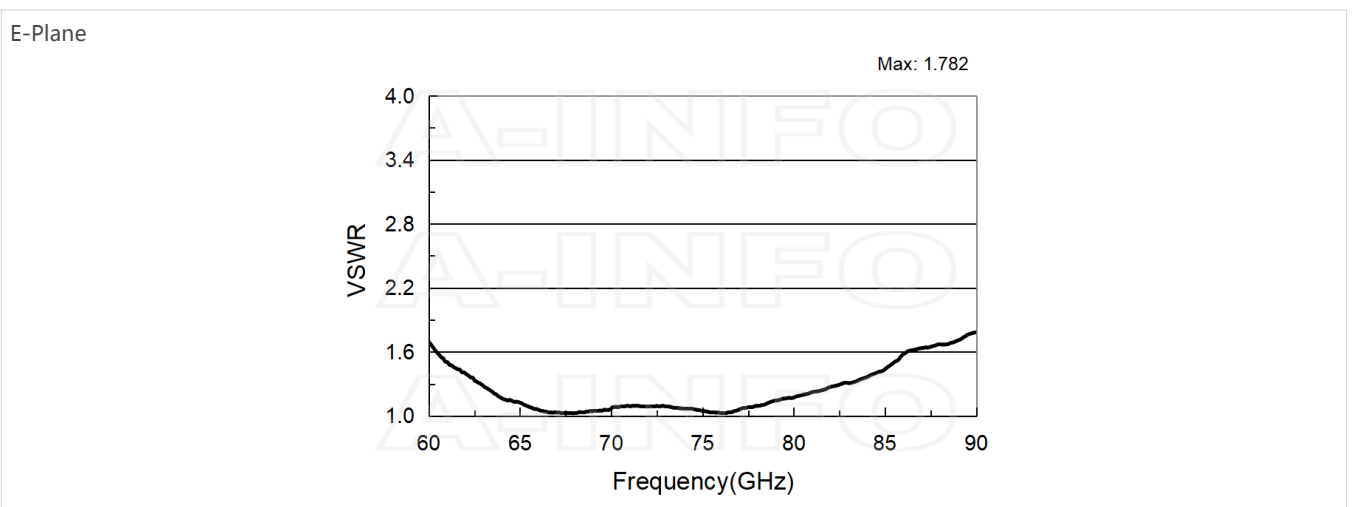


## Typical Test Results

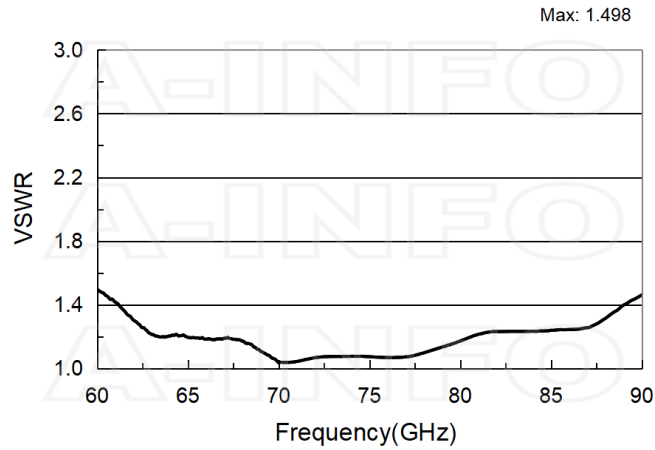
### Insertion Loss(Including the theoretical loss 3.0dB)



### VSWR

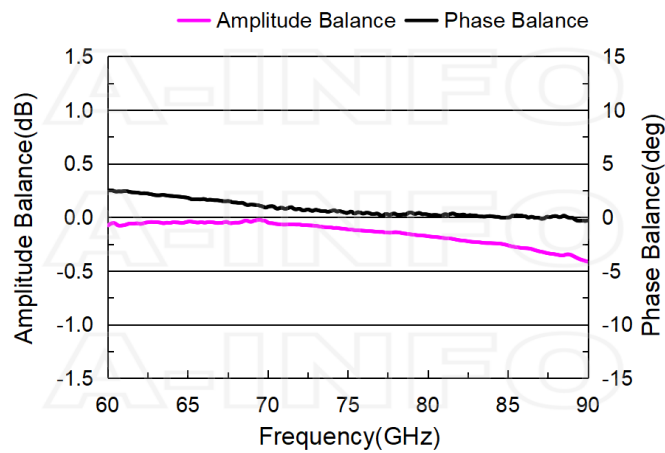


H-Plane

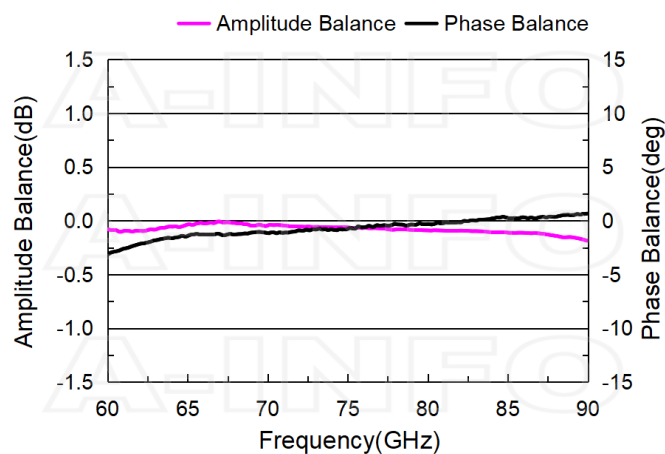


Unbalance

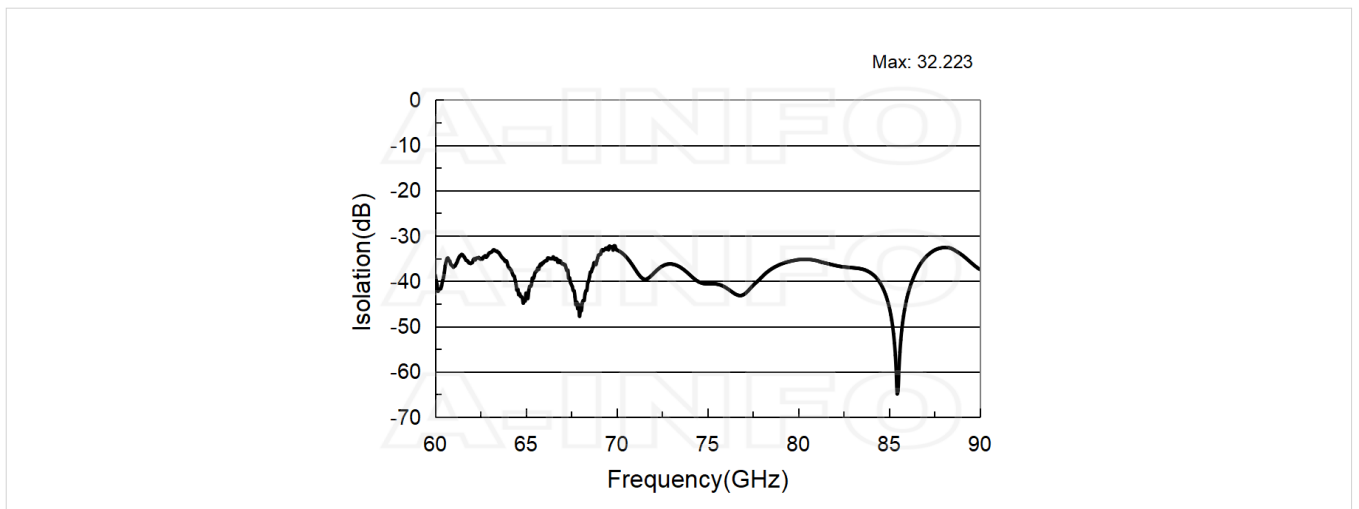
E-Plane



H-Plane



## Isolation



## Similar Products



12WET\_Cu WR12 Waveguide E-Plane Tee 60-90GHz with Three Rectangular Waveguide Interfaces



15WET\_Cu WR15 Waveguide E-Plane Tee 50-75GHz with Three Rectangular Waveguide Interfaces



15WMT\_Cu WR15 Waveguide Magic Tee 50-75GHz with Four Rectangular Waveguide Interfaces



10WMT\_Cu WR10 Waveguide Magic Tee 75-110GHz with Four Rectangular Waveguide Interfaces



10WET\_Cu WR10 Waveguide E-Plane Tee 75-110GHz with Three Rectangular Waveguide Interfaces

## About this Datasheet

<ul style="list-style-type: none"><li>● <b>Product Information</b></li></ul> <p>Product Link: <a href="https://www.ainfoinc.com/12wmt-cu-wr12-waveguide-magic-tee-60-90-ghz-fugg740-ug-387-u">https://www.ainfoinc.com/12wmt-cu-wr12-waveguide-magic-tee-60-90-ghz-fugg740-ug-387-u</a> Data subject to change without notice. © A-INFO INC. 2024. All Rights Reserved</p>	<ul style="list-style-type: none"><li>● <b>Contact Us</b></li></ul> <p>Address: 60 Tesla, Irvine, CA 92618, USA</p> <p>Website: <a href="http://www.ainfoinc.com">www.ainfoinc.com</a></p> <p>Email: <a href="mailto:sales@ainfoinc.com">sales@ainfoinc.com</a></p>	<ul style="list-style-type: none"><li>● <b>Phone &amp; Fax</b></li></ul> <p>Phone: +1-949-639-9688 +1-949-639-9608</p> <p>Fax: +1-949-639-9670</p>
--	---	--