



51WMT WR51 Waveguide Magic Tee 15-22GHz with Four Rectangular Waveguide Interfaces

WR51 Waveguide Magic Tee Operating From 15 to 22GHz with Four Rectangular Waveguide Interfaces

Product Information

SKU	51WMT
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Description

Waveguide magic tee 51WMT, operating from 15 to 22GHz with a 0.4dB insertion loss, 40dB isolation, H-Plane VSWR 1.30:1 and E-Plane VSWR 1.50:1. 51WMT is a four-ports hybrid coupler or power divider. All the ports have standard WR51 waveguides with the same flanges FBP180(UBR180). The magic tee can be used as a power combiner or a power divider based on the given application's needs.

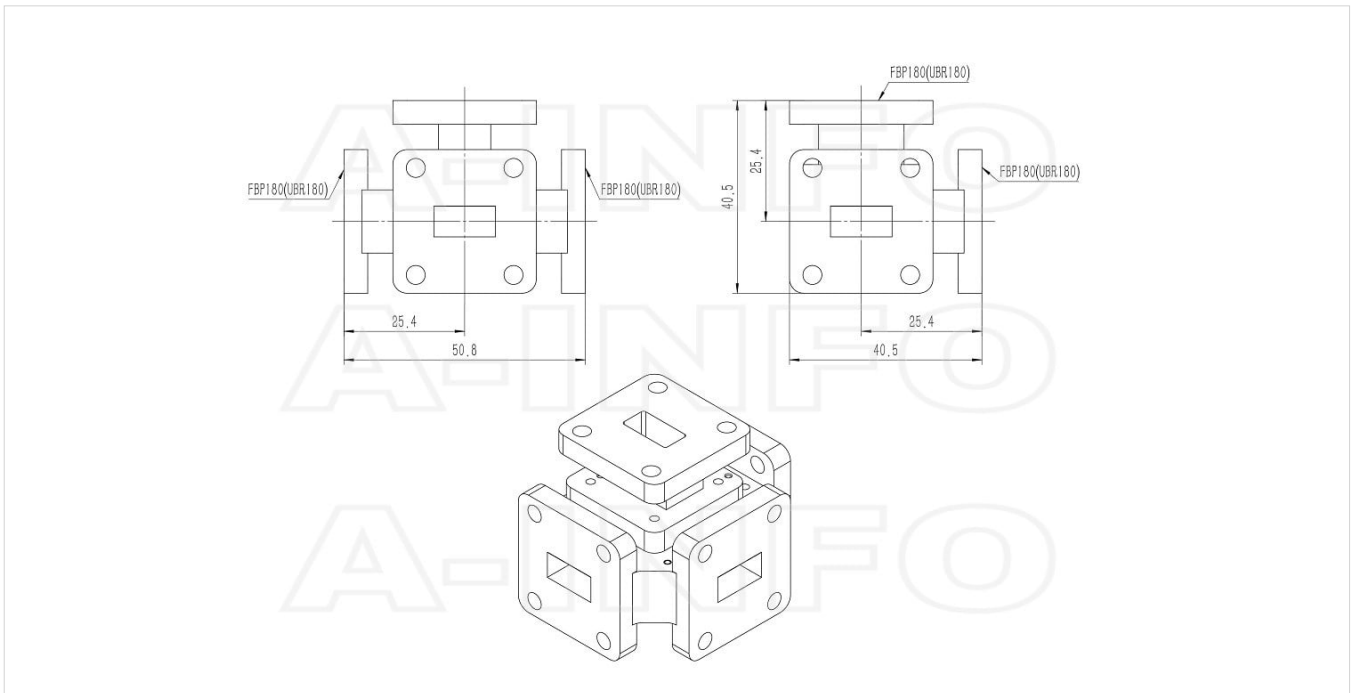
Technical Specification

Electrical Specification		Interface	
WG Tee Type	Magic Tee	Flange 3 Style	Square
Waveguide Band	Ku K	Flange 3 Type	Cover
Waveguide Type	Rectangular	Flange 3 Designation	FBP180(UBR180)
Waveguide Size EIA WR	WR51	Flange 4 Style	Square
Frequency, Min (GHz)	15	Flange 4 Type	Cover
Frequency, Max (GHz)	22	Flange 4 Designation	FBP180(UBR180)
I.L., Typ (dB)	0.4	Mechanical Specification	
I.L., Max (dB)	0.5	Body Material	Al
VSWR, H-Plane, Typ	1.3	Size, L (mm)	50.8
VSWR, H-Plane, Typ	1.30:1	Size, W (mm)	40.5
VSWR, E-Plane, Typ	1.5	Size, H (mm)	40.5
VSWR, E-Plane, Typ	1.50:1	Weight, (kg)	0.1
Isolation, Min (dB)	30	Pressure Sealed	No
Isolation, Typ (dB)	40	Environmental Specification	
Power Handling, CW, (W)	130	Operating Temp. Low (°C)	-55
Power Handling, Peak, (KW)	85	Operating Temp. High (°C)	85
Interface		Storage Temp. Low (°C)	-60
Flange 1 Style	Square	Storage Temp. High (°C)	90
Flange 1 Type	Cover		
Flange 1 Designation	FBP180(UBR180)		
Flange 2 Style	Square		
Flange 2 Type	Cover		
Flange 2 Designation	FBP180(UBR180)		

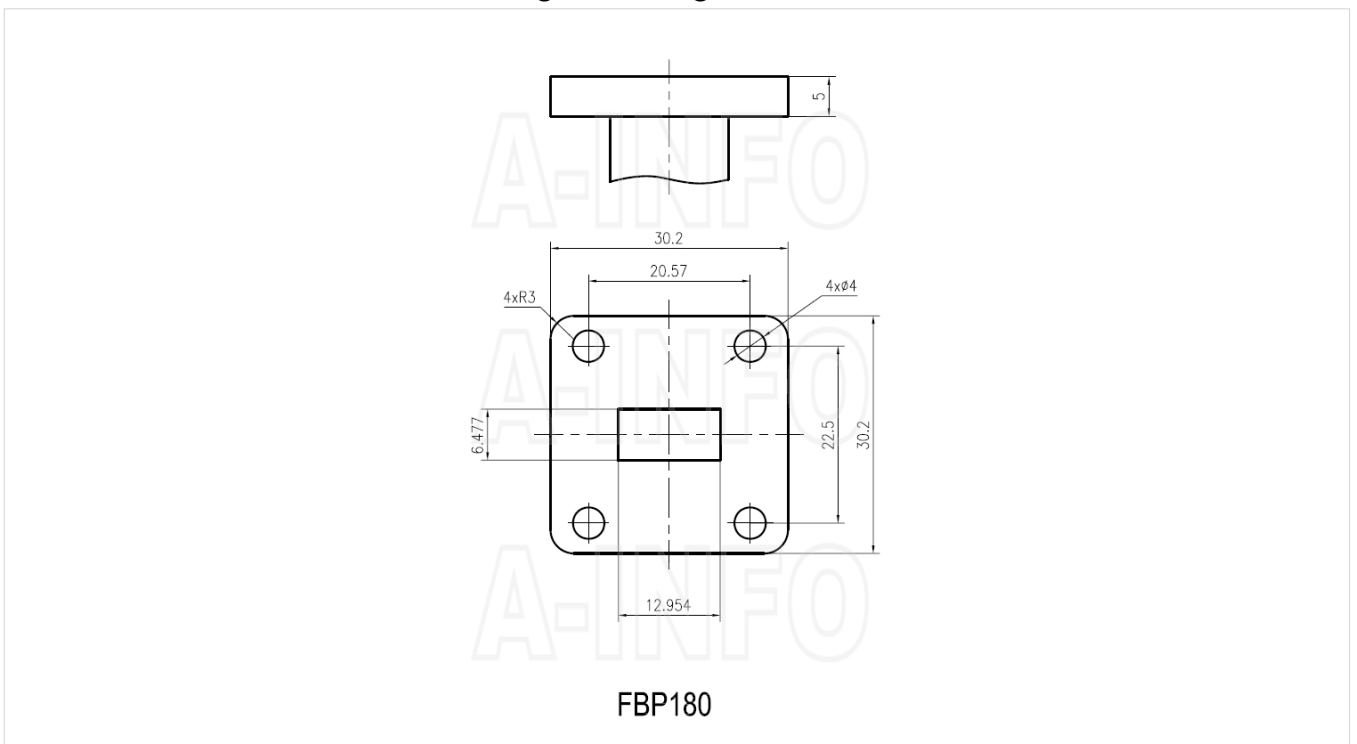
Additional Information

Application	General Purpose Indoor & Outdoor, Fixed
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Outline Drawing(Size: mm)



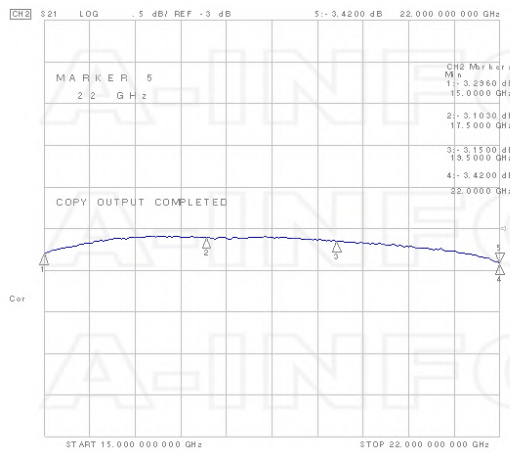
Flange Drawing(Size: mm)



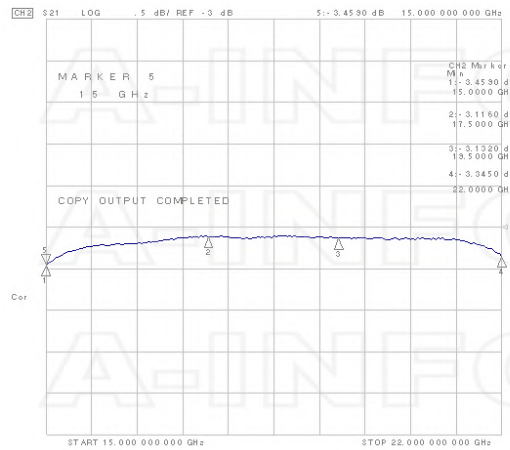
Typical Test Results

Insertion Loss(Including the theoretical loss 3.0dB)

E-Plane

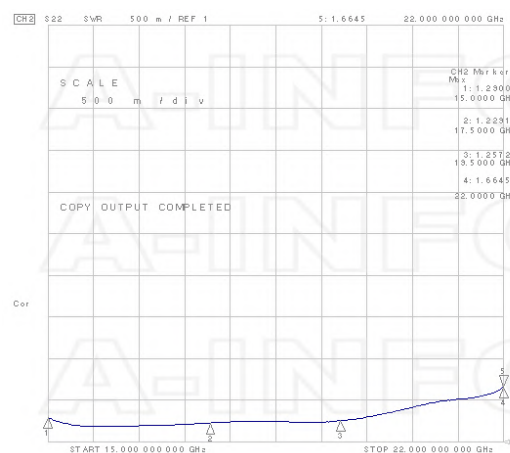


H-Plane

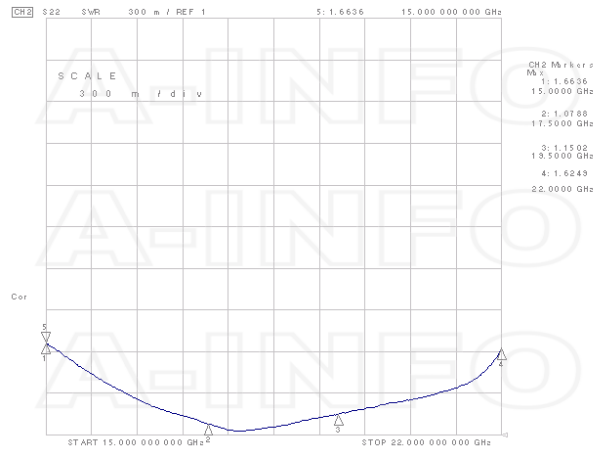


VSWR

E-Plane

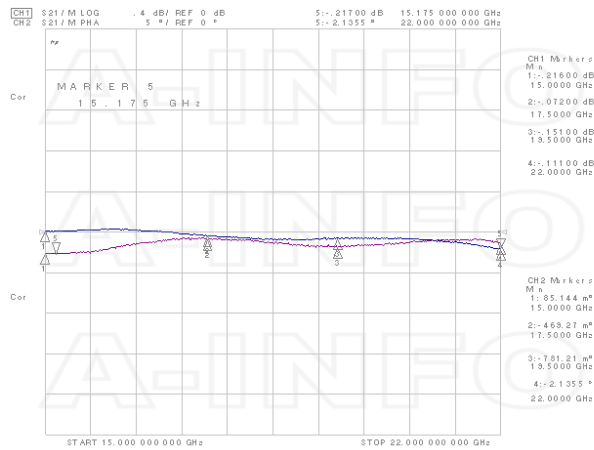


H-Plane

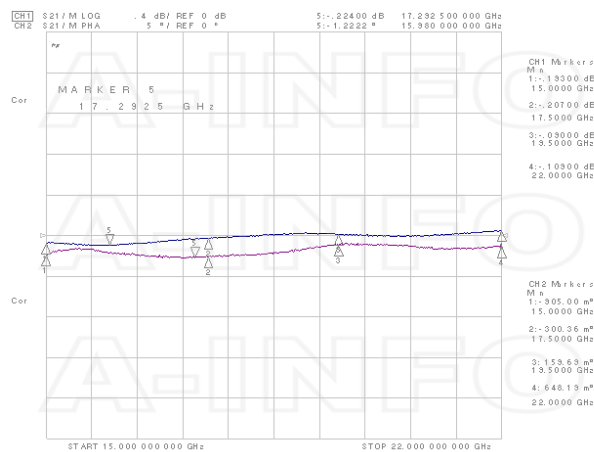


Unbalance

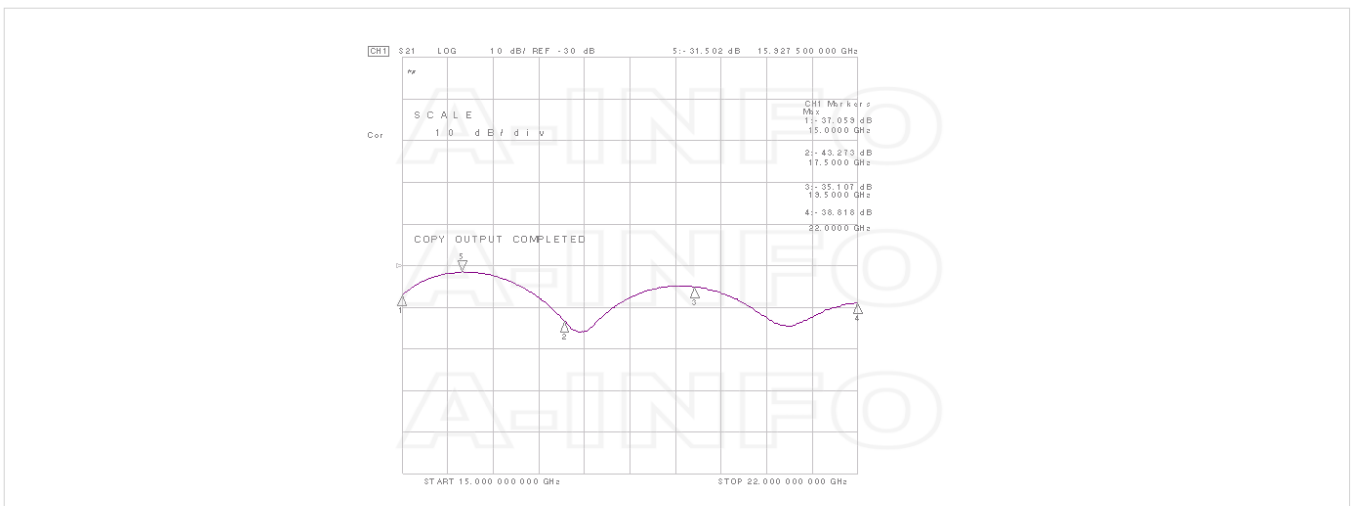
E-Plane



H-Plane



Isolation



Similar Products



51WET WR51 Waveguide E-Plane Tee 15-22GHz with Three Rectangular Waveguide Interfaces



51WHT WR51 Waveguide H-Plane Tee 15-22GHz with Three Rectangular Waveguide Interfaces



62WET WR62 Waveguide E-Plane Tee 12.4-18GHz with Three Rectangular Waveguide Interfaces



62WHT WR62 Waveguide H-Plane Tee 12.4-18GHz with Three Rectangular Waveguide Interfaces



62WMT WR62 Waveguide Magic Tee 12.4-18GHz with Four Rectangular Waveguide Interfaces



62WMT_BMBPBPB WR62 Waveguide Magic Tee 12.4-18GHz with Four Rectangular Waveguide Interfaces



42WET_Cu WR42 Waveguide E-Plane Tee 18-26.5GHz with Three Rectangular Waveguide Interfaces



42WHT_Cu WR42 Waveguide H-Plane Tee 18-26.5GHz with Three Rectangular Waveguide Interfaces



42WMT_Cu WR42 Waveguide
Magic Tee 18-26.5GHz with Four
Rectangular Waveguide
Interfaces

About this Datasheet

<ul style="list-style-type: none">● Product Information Product Link: https://www.ainfoinc.com/51wmt-wr51-waveguide-magic-tee-15-22-ghz-fbp180-ubr180 Data subject to change without notice. © A-INFO INC. 2024. All Rights Reserved	<ul style="list-style-type: none">● Contact Us Address: 60 Tesla, Irvine, CA 92618, USA Website: www.ainfoinc.com Email: sales@ainfoinc.com	<ul style="list-style-type: none">● Phone & Fax Phone: +1-949-639-9688 +1-949-639-9608 Fax: +1-949-639-9670
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