

V-band Waveguide Directional Coupler

WR-15/20dB Coupling

Model: TDC-050075-20-15

TDC-050075-20-15 is a V-band, four-port waveguide directional coupler that delivers a 20 dB nominal coupling level and 30 dB typical directivity across the full waveguide band from 50 to 75 GHz. The interfaces of the coupler are WR-15 waveguides with UG-385/U-M anti-cocking flanges.

Features:

- Operating Frequency 50 to 75 GHz
- Full Band Operation
- Low Insertion Loss
- Moderate Directivity

Applications:

- Test Labs
- Instrumentations
- Sub-assemblies

Electrical Characteristics:

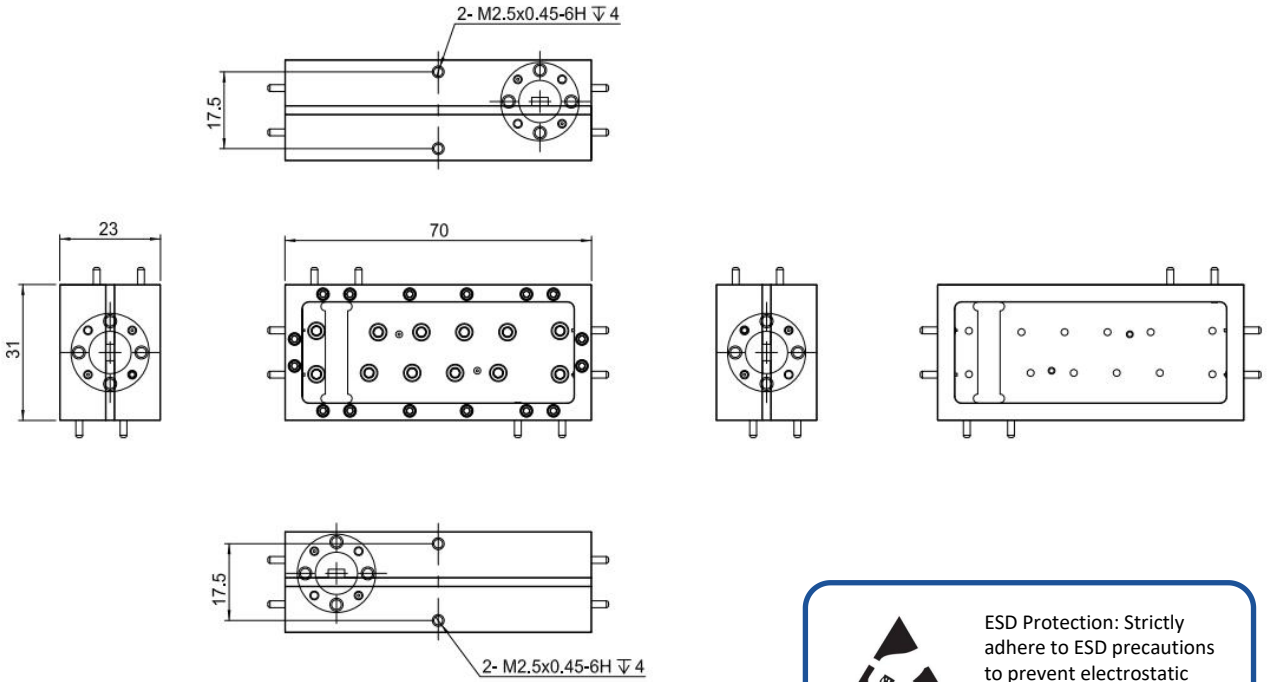
Parameter	Min	Typ	Max	Units
Frequency Range	50		75	GHz
Insertion Loss		0.5		dB
Coupling		20		dB
Directivity		30		dB
Input VSWR		1.1		:1
Output VSWR		1.1		:1

Environmental And Physical Characteristics:

Description	Parameter	Units
Operating Temperature	-40 To +85	°C
Storage Temperature	-40 to +85	°C
Waveguide Connectors	WR-15/UG-385/U	
Coupled Port	WR-15/UG-385/U	
Size	70*31*23	mm

Outline Drawing:

Unit:mm



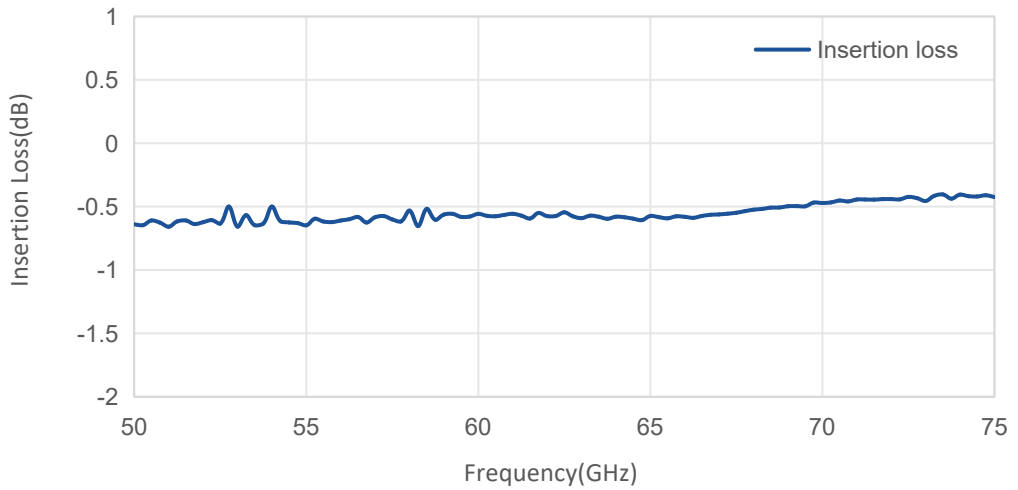
ESD Protection: Strictly adhere to ESD precautions to prevent electrostatic damage.

Ordering Information:

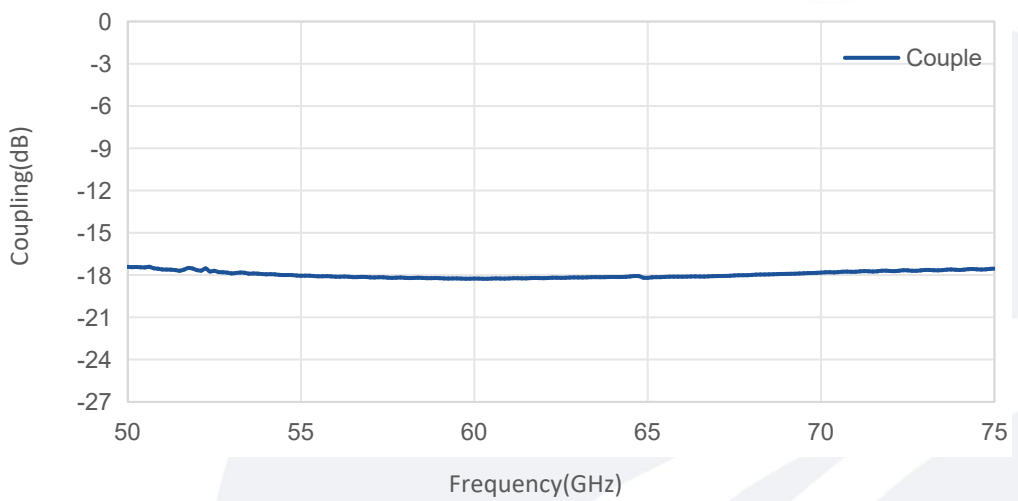
Base Number	Description	Revision
TDC-050075-20-15	V-band Waveguide Directional Coupler,50-75GHz, Insertion Loss:0.5dB Typ, Coupling:20dB Typ,WR-15	Rev.1.0

Typical Performance Data:

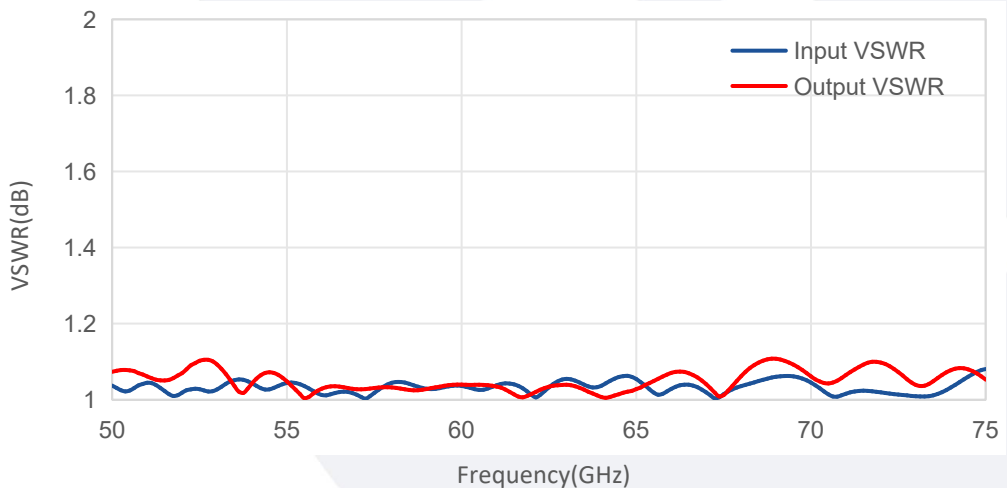
Insertion Loss vs Frequency



Coupling vs Frequency

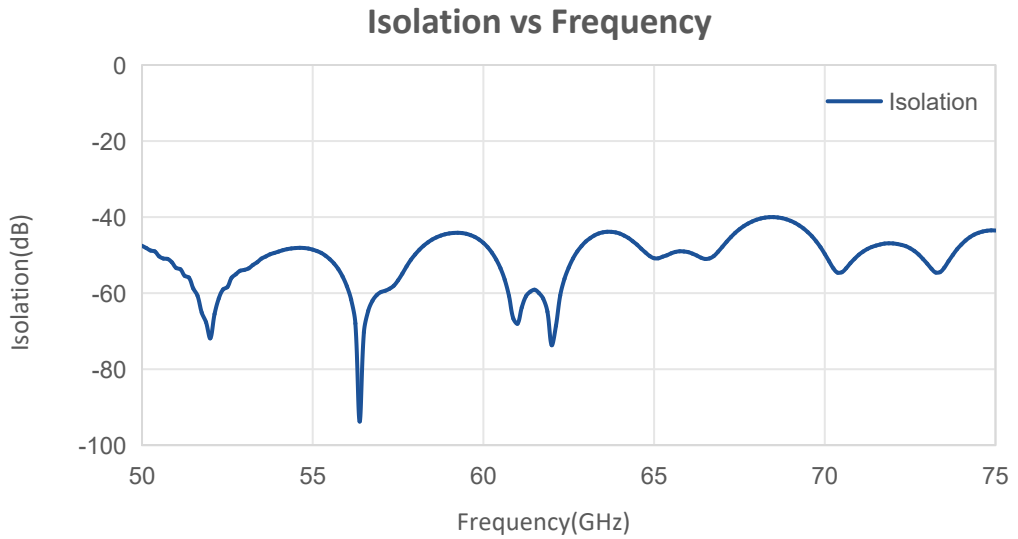


VSWR vs Frequency



Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

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