

Waveguide Dual-Directional Coupler

WR-12/WR-12/10dB Coupling

Model: TDC-060090-10-12

TDC-060090-10-12 is a four-port waveguide dual-directional coupler that delivers a 10 dB nominal coupling level and 30 dB typical directivity across the full waveguide band from 60 to 90 GHz. The interfaces of the dual-directional coupler are WR-12 waveguides with UG-387/U-M anti-cocking flanges.

Features:

- Operating Frequency 60 to 90GHz
- Full Band Operation
- Low Insertion Loss
- Moderate Directivity

Applications:

- Test Labs
- Instrumentations
- Sub-assemblies

Electrical Characteristics:

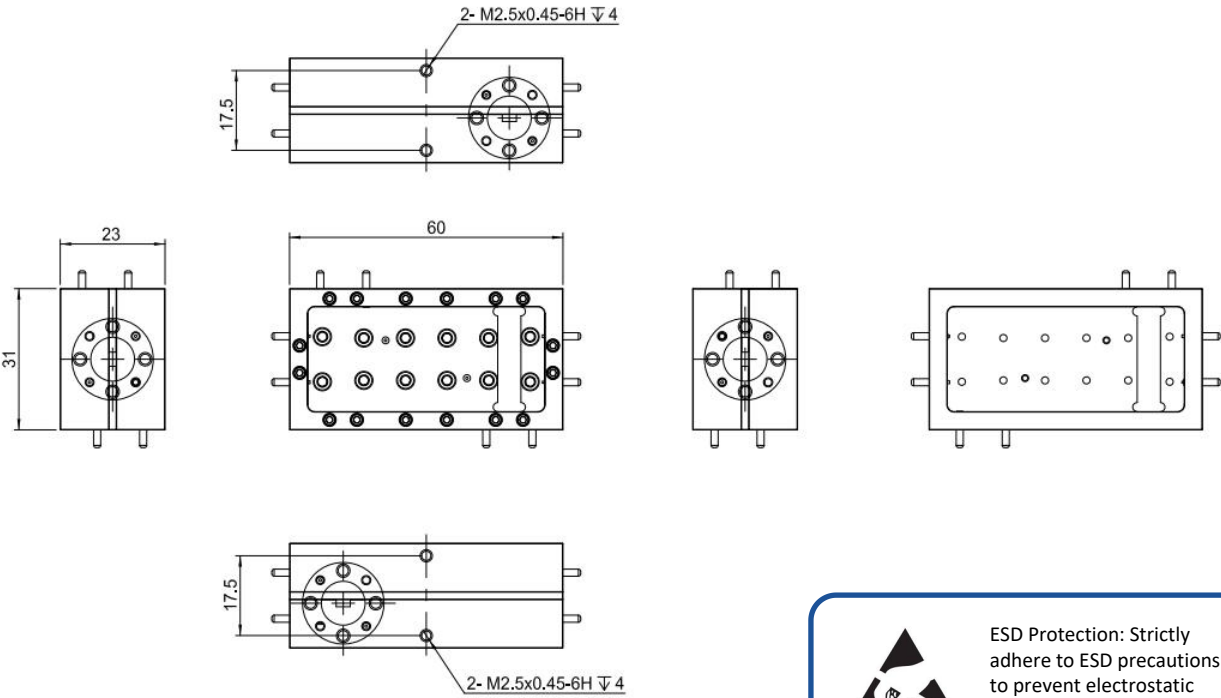
Parameter	Min	Typ	Max	Units
Frequency Range	60		90	GHz
Main Line VSWR		1.2		:1
Coupling Port VSWR		1.3		:1
Insertion Loss		1.8		dB
Coupling		10		dB
Directivity		30		dB

Envrionmental And Physical Characteristics:

Description	Parameter	Units
Material	Brass	
Finish	Gold plated	
Waveguide Connectors	WR-12/UG-387/U	
Coupled Port	WR-12/UG-387/U	
Size	60*31*23	mm

Outline Drawing:

Unit:mm; Tolerance:±0.1mm



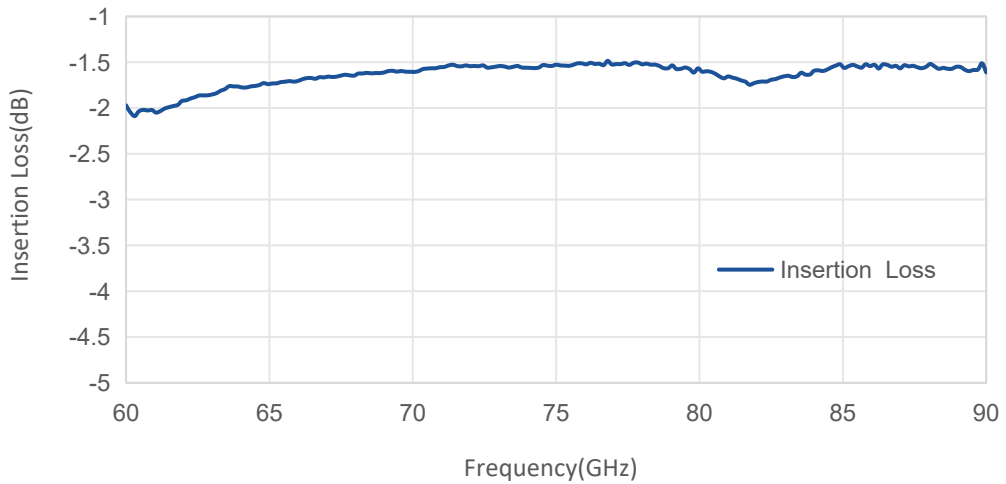
ESD Protection: Strictly adhere to ESD precautions to prevent electrostatic damage.

Ordering Information:

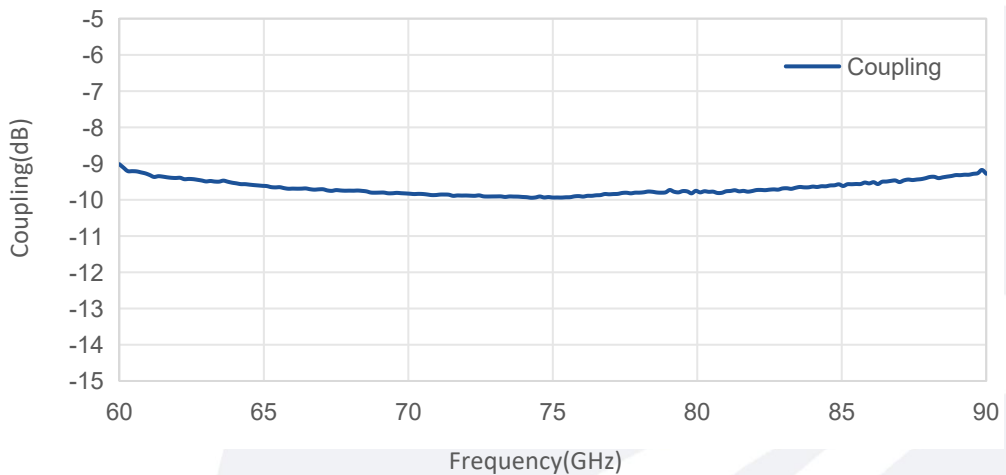
Base Number	Description	Revision
TDC-060090-10-12	Waveguide Dual-Directional Coupler,60-90GHz, Insertion Loss:1.8dB Typ, Coupling:10dB Typ,WR-12	Rev.1.0

Typical Performance Data:

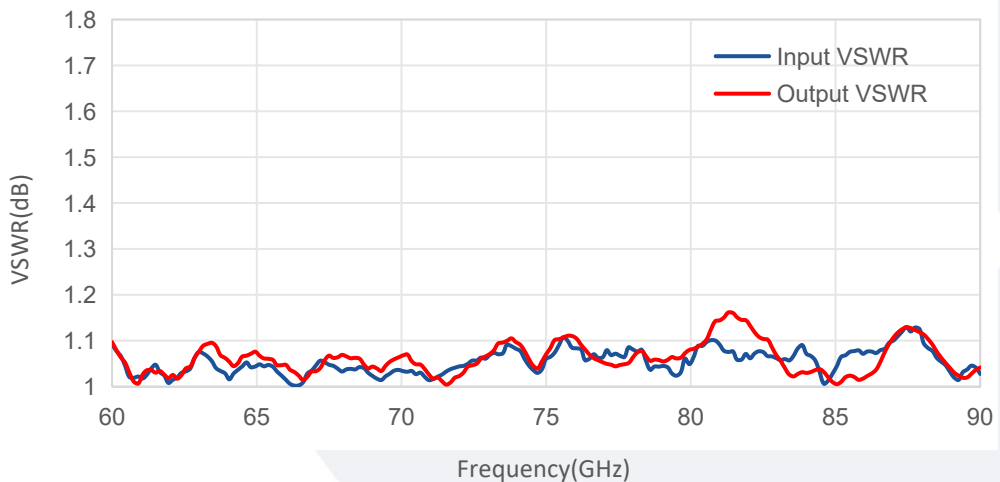
Insertion Loss vs Frequency



Coupling vs Frequency



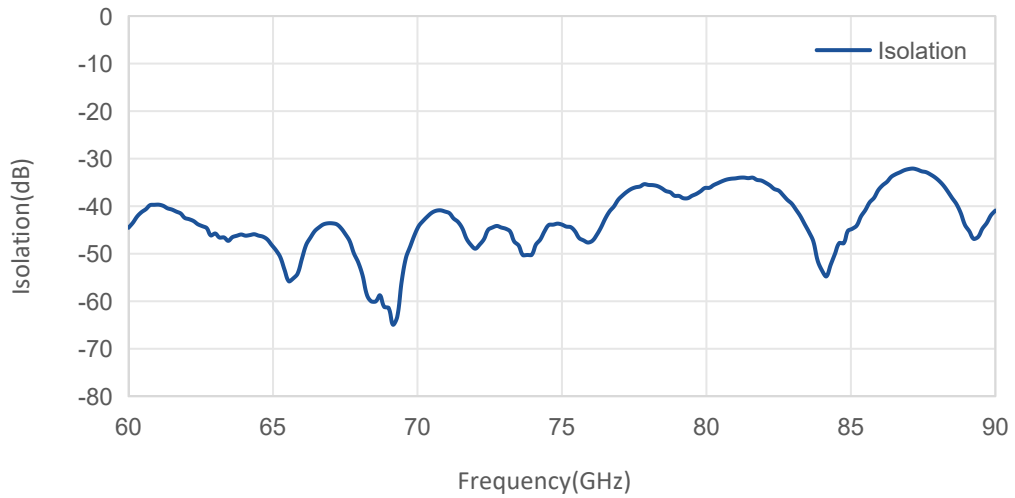
VSWR vs Frequency



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.

Typical Performance Data:

Isolation 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.