

D-band Dual Directional Waveguide Coupler WR-6.5/10 dB Coupling

Model: TDC-110170-10-06

TDC-110170-10-06 is a D-band, four-port waveguide dual directional coupler that delivers a 10 dB nominal coupling level and 40 dB typical isolation across the full waveguide band from 110 to 170 GHz. The interfaces of the coupler are WR-6.5 waveguides with UG-387/U-M anti-cocking flanges.

Features:

- Operating Frequency 110 to 170 GHz
- Full Band Operation
- Low Insertion Loss
- Moderate Directivity

Applications:

- Test Labs
- Instrumentations
- Sub-assemblies

Electrical Characteristics:

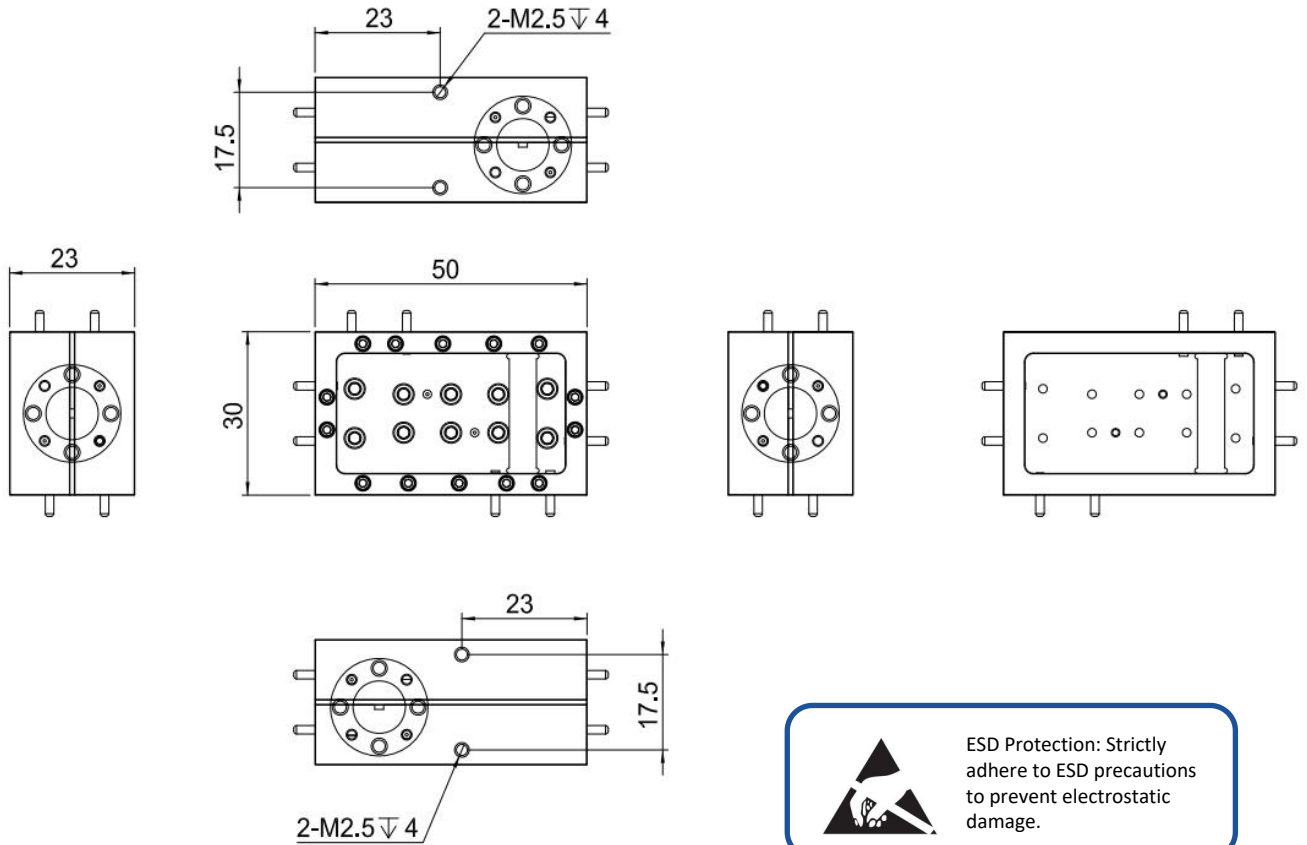

Parameter	Min	Typ	Max	Units
Frequency Range	110		170	GHz
Insertion Loss		2.5		dB
Coupling		10		dB
Coupling Accuracy		±2		dB
Isolation		40		dB
Directivity		30		dB
Main Line VSWR		1.2		:1
Coupling Port VSWR		1.2		:1

Environmental And Physical Characteristics:

Description	Parameter	Units
Operating Temperature	-40 To +85	°C
Storage Temperature	-40 to +85	°C
Input/Output Connectors	WR-6.5/U-387/U	
Isolation/Coupling Port	WR-6.5/U-387/U	
Size	50*30*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-110170-10-06	D-band Dual Directional Waveguide Coupler, 110-170GHz, Insertion Loss:2.5dB Typ, Coupling:10dB Typ, WR-6.5	Rev.1.0