

## D-band Dual Directional Waveguide Coupler

### WR-6.5/30 dB Coupling

**Model: TDC-110170-30-06**

TDC-110170-30-06 is a D-band, four-port waveguide dual directional coupler that delivers a 30 dB nominal coupling level and 55 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

### 电气特性 Electrical Characteristics:

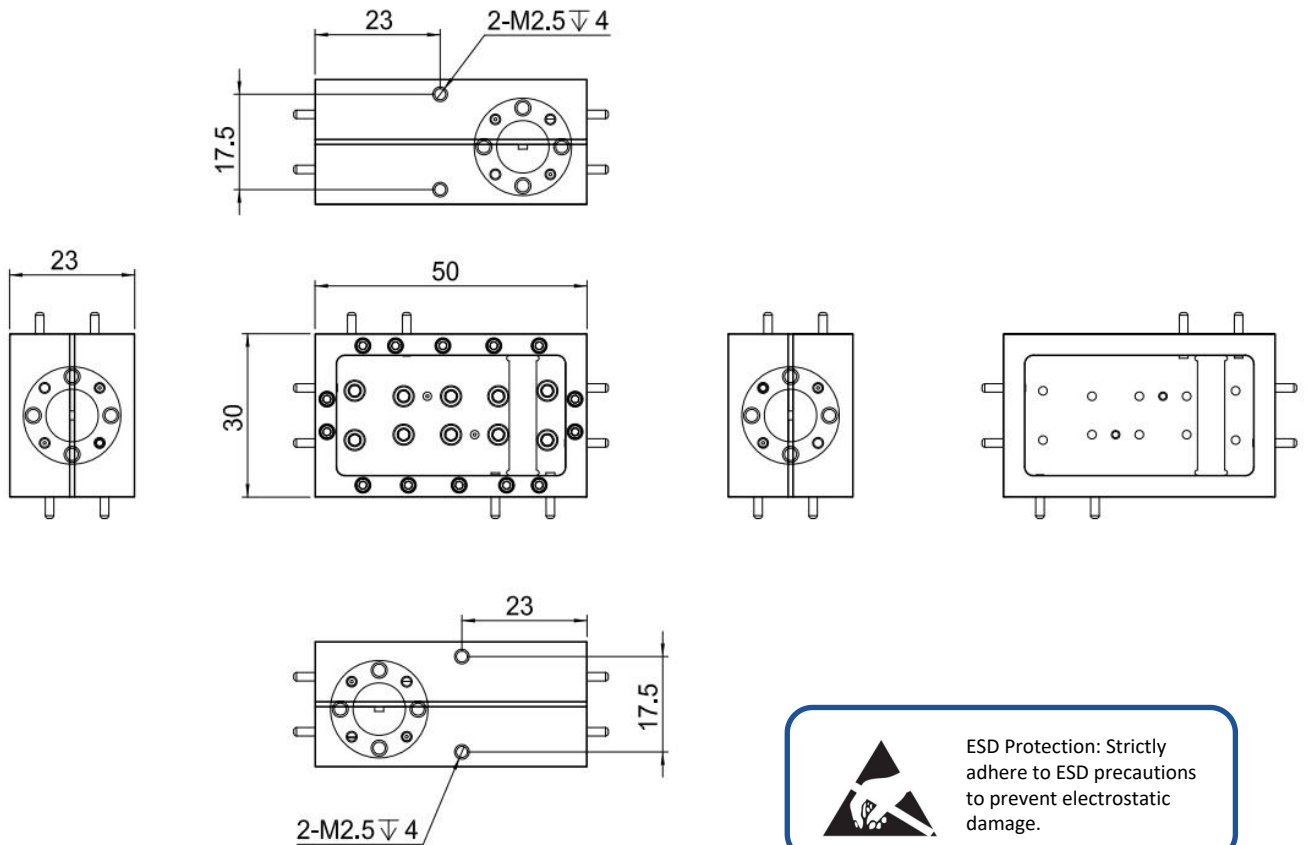

参数 Parameter	Min	Typ	Max	单位 Units
工作频率 Frequency Range	110		170	GHz
插入损耗 Insertion Loss		0.9		dB
耦合度 Coupling		30		dB
耦合精度 Coupling Accuracy		±2		dB
隔离度 Isolation		55		dB
方向性 Directivity		25		dB
主线驻波 Main Line VSWR		1.2		:1
耦合口驻波 Coupling Port VSWR		1.2		:1

### 环境和机械特性 Environmental And Physical Characteristics:

类型 Description	参数 Parameter	单位 Units
操作温度 Operating Temperature	-40 To +85	°C
存储温度 Storage Temperature	-40 to +85	°C
输入/输出接口 Input/Output Connectors	WR-6.5/U-387/U	
隔离/耦合接口 Isolation/Coupling Port	WR-6.5/U-387/U	
尺寸 Size	50*30*23	mm

**外形图 Outline Drawing:**

Unit:mm; Tolerance:±0.1mm

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

**订货信息 Ordering Information:**

标准型号 Base Number	描述 Description	版本号 Revision
TDC-110170-30-06	D-band Dual Directional Waveguide Coupler, 110-170GHz, Insertion Loss:0.9dB Typ, Coupling:30dB Typ, WR-6.5	Rev.1.0