

G-band Waveguide Directional Coupler WR-5.1/20dB Coupling

Model: TDC-140220-20-05

TDC-140220-20-05 is a G-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 140 to 220 GHz. The interfaces of the coupler are WR-5.1 waveguides with UG-387/U-M anti-cocking flanges.

Features:

- Operating Frequency 140 to 220 GHz
- Full Band Operation
- Low Insertion Loss
- Moderate Directivity

Applications:

- Test Labs
- Instrumentations
- Sub-assemblies

Electrical Characteristics:

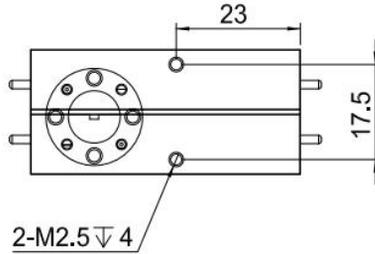
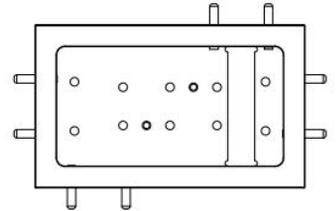
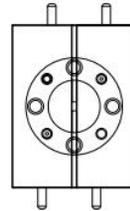
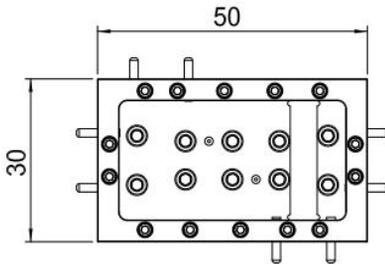
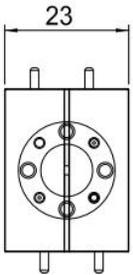
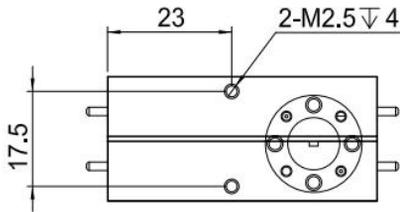
| Parameter | Min | Typ | Max | Units |
|-----------------|-----|-----|-----|-------|
| Frequency Range | 140 | | 220 | GHz |
| Insertion Loss | | 1.5 | | dB |
| Coupling | | 20 | | dB |
| Directivity | | 30 | | dB |
| Input VSWR | | 1.1 | | :1 |
| Output VSWR | | 1.1 | | :1 |

Environmental And Physical Characteristics:

| Description | Parameter | Units |
|-----------------------|-----------------|-------|
| Operating Temperature | -40 To +85 | °C |
| Storage Temperature | -40 to +85 | °C |
| Waveguide Connectors | WR-5.1/UG-387/U | |
| Coupled Port | WR-5.1/UG-387/U | |
| Size | 50*30*23 | mm |

Outline Drawing:

Unit:mm



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

Ordering Information:

| Base Number | Description | Revision |
|------------------|---|----------|
| TDC-140220-20-05 | G-band Waveguide Directional Coupler,140-220GHz, Insertion Loss:1.5dB Typ, Coupling:20dB Typ,WR-5.1 | Rev.1.0 |