

## Y-band Waveguide Directional Coupler WR-4.3/20dB Coupling

**Model: TDC-170260-20-04**

TDC-170260-20-04 is a Y-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 170 to 260 GHz. The interfaces of the coupler are WR-4.3 waveguides with UG-387/U-M anti-cocking flanges.

### Features:

- Operating Frequency 170 to 260 GHz
- Full Band Operation
- Low Insertion Loss
- Moderate Directivity

### Applications:

- Test Labs
- Instrumentations
- Sub-assemblies

### Electrical Characteristics:

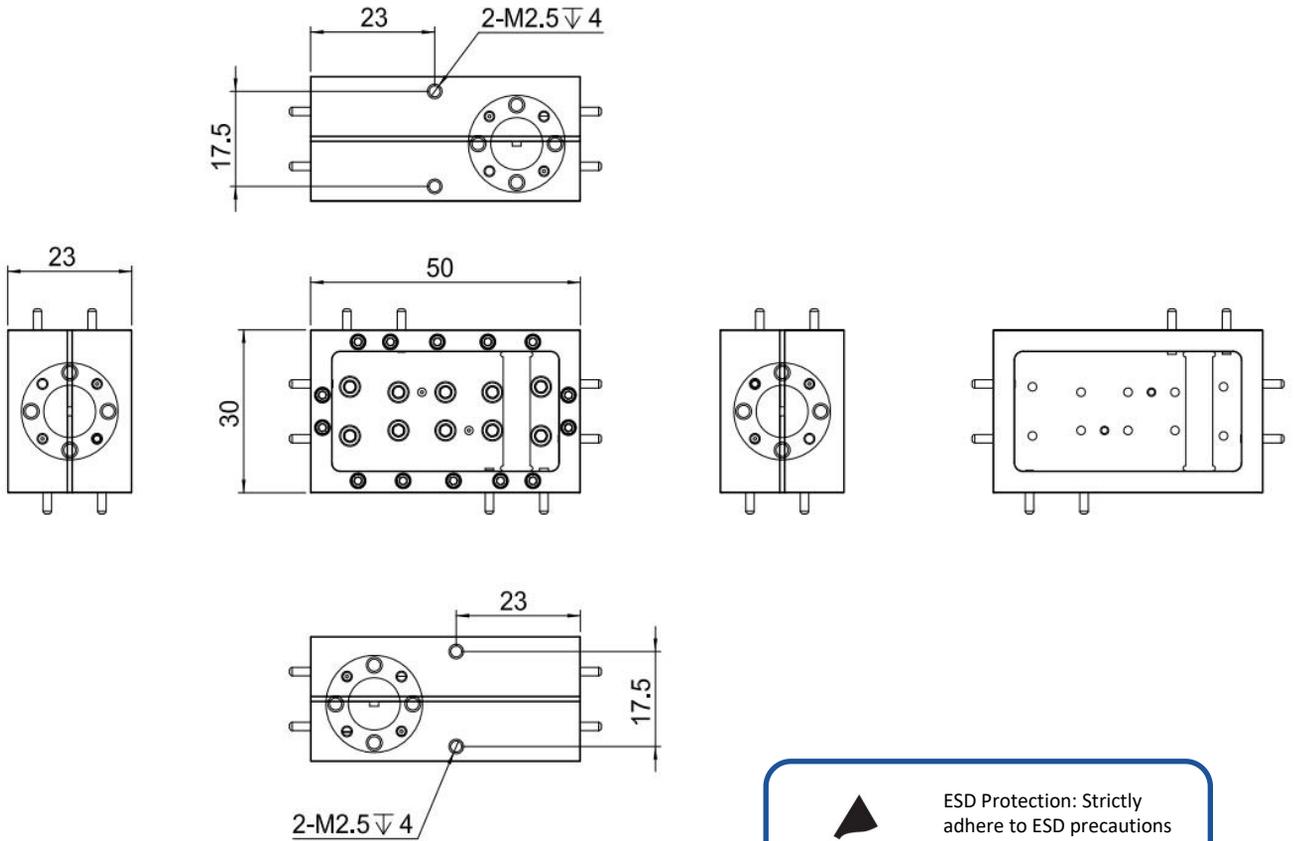
| Parameter       | Min | Typ | Max | Units |
|-----------------|-----|-----|-----|-------|
| Frequency Range | 170 |     | 260 | GHz   |
| Insertion Loss  |     | 2   |     | dB    |
| Coupling        |     | 20  |     | dB    |
| Directivity     |     | 30  |     | dB    |
| Input VSWR      |     | 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-4.3/UG-387/U |       |
| Coupled Port          | WR-4.3/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-170260-20-04 | Y-band Waveguide Directional Coupler,170-260GHz, Insertion Loss:2dB Typ, Coupling:20dB Typ,WR-4.3 | Rev.1.0  |