

## F-band Waveguide Directional Coupler

### WR-08/20 dB Coupling

**Model: TC-090140-20-08**

TC-090140-20-08 is a F-band, three-port waveguide directional coupler that delivers a 20 dB nominal coupling level and 35 dB typical directivity across the full waveguide band from 90 to 140 GHz. The interfaces of the coupler are WR-08 waveguides with UG-387/U-M anti-cocking flanges.

#### Features:

- Operating Frequency: 90 to 140 GHz
- Full Band Operation
- Low Insertion Loss
- Moderate Directivity

#### Applications:

- Test Labs
- Instrumentations
- Sub-assemblies

### 电气特性 Electrical Characteristics:

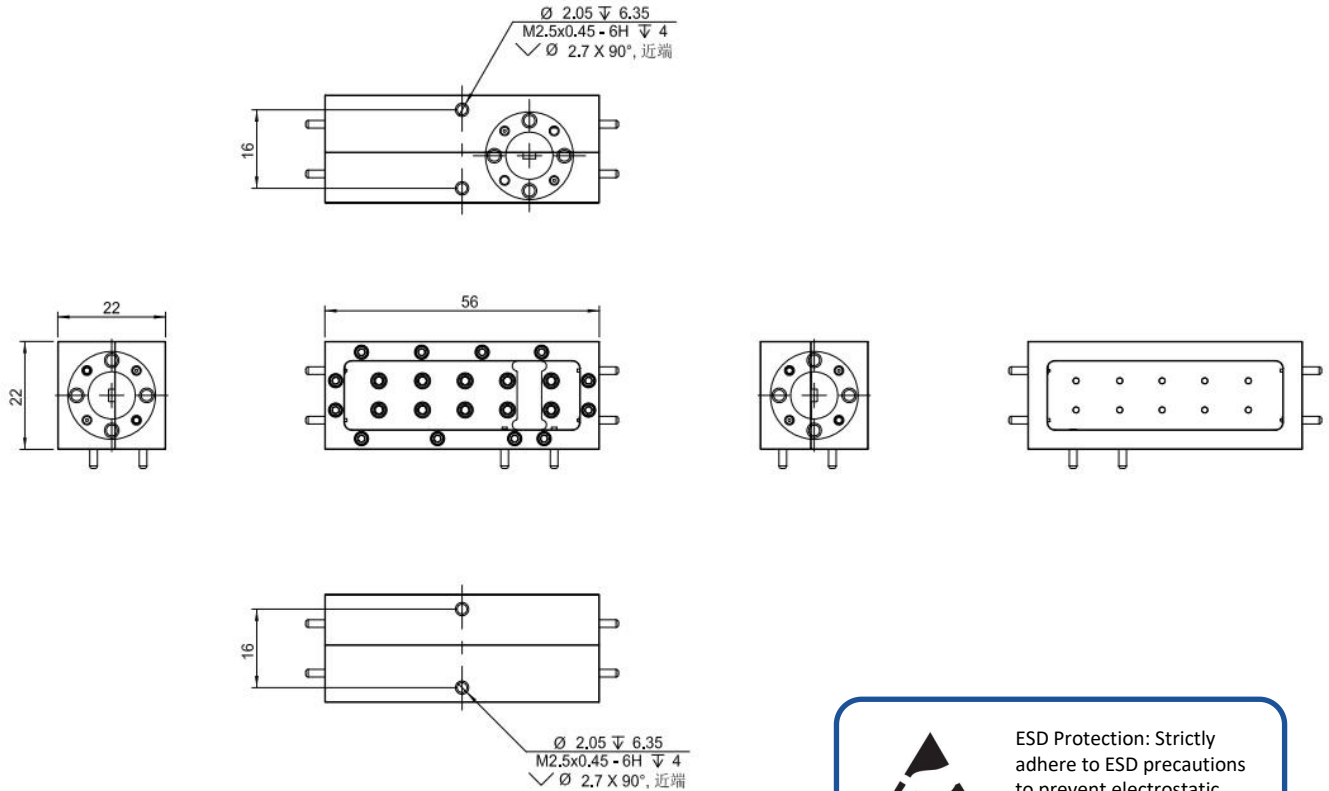
| 参数 Parameter         | Min | Typ | Max | 单位 Units |
|----------------------|-----|-----|-----|----------|
| 工作频率 Frequency Range | 90  |     | 140 | GHz      |
| 插入损耗 Insertion Loss  |     | 1   |     | dB       |
| 耦合度 Coupling         |     | 20  |     | dB       |
| 方向性 Directivity      |     | 35  |     | dB       |
| 输入驻波 Input VSWR      |     | 1.1 |     | :1       |
| 输出驻波 Output VSWR     |     | 1.1 |     | :1       |

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

| 类型 Description            | 参数 Parameter   | 单位 Units |
|---------------------------|----------------|----------|
| 操作温度 Operating Temerature | -40 To +85     | °C       |
| 存储温度 Storage Temerature   | -40 to +85     | °C       |
| 波导接口 Waveguide Connectors | WR-08/UG-387/U |          |
| 耦合接口 Coupled Port         | WR-08/UG-387/U |          |
| 尺寸 Size                   | 56*22*22       | mm       |

## 外形图 Outline Drawing:

Unit:mm



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 |
|------------------|-----------------------------------------------------------------------------------------------------|--------------|
| TC-090140-20-08  | F-band Waveguide Directional Coupler, 90-140GHz, Insertion Loss: 1dB Typ, Coupling: 20dB Typ, WR-08 | Rev.1.0      |