Suzhou Talent Microwave,Inc
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# Coax Directional Coupler

## 0.4-18GHz/20dB Coupling/SMA Female

## Model: TC-04180-20S

TC-04180-20S is a coaxial directional coupler that delivers a 20 dB nominal coupling level and 10 dB minimum directivity across the full frequency range from 0.4 to 18 GHz. It is a three-port passive device that can couple a portion of the power from the main transmission line to the auxiliary line in a directional manner.

### Features:

- Output Frequency: 0.4-18GHz
- Coupling: 20dB Typ
- Stackable mechanical design
- Low Insertion Loss
- Moderate Directivity
- 50 Ohm Matched Input / Output

### Applications:

- Test Labs
- Instrumentations
- Sub-assemblies

### Electrical Characteristics:

| Parameter | | Min | Typ | Max | Units |
|---|---|---|---|---|---|
| Frequency Range | | 0.4 | | 18 | GHz |
| Insertion Loss (Excl Coupling) | | | 1.0 | 1.2 | dB |
| Coupling | 400-500MHz | | 20±2.6 | | dB |
| | 500-1800MHz | | 20±1.6 | | dB |
| Frequency Sensitivity | | | ±1.6 | | dB |
| Directivity | | 10 | 12 | | dB |
| Power Handling | | | | 30 | W |
| VSWR | | | | 1.6 | :1 |
| Impedance | | | 50 | | Ohms |

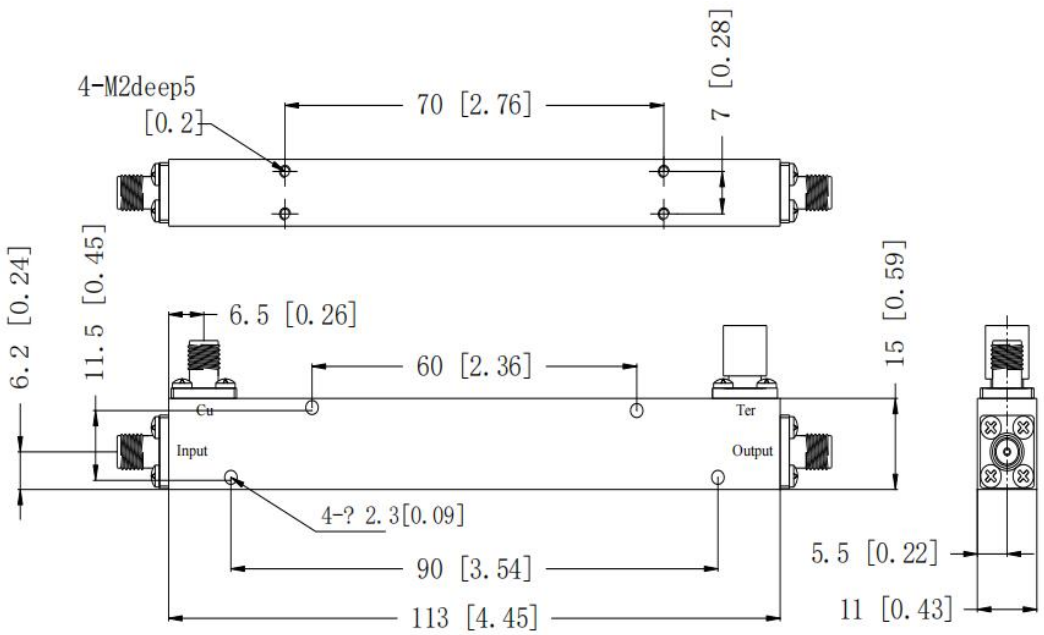
### Mechanical Specifications:

| Parameter | Value | Units |
|---|---|---|
| Operating Temperature | -55-+85 | ℃ |
| Input/Output Connector | SMA Female/SMA Female | |
| Size | 113*15*11 | mm |

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## Outline Drawing:

Unit:mm




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

## Ordering Information:

| Base Number | Description | Revision |
|---|---|---|
| TC-04180-20S | Coaxial Directional Coupler<br>0.4-18GHz, Coulping:20dB, SMA Female | Rev.1.0 |