Suzhou Talent Microwave,Inc
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# K-band Waveguide Directional Coupler

## WR-42/WR-42/10dB Coupling

## Model: TC-018026-10-42

TC-018026-10-42 is a K-band, three-port waveguide directional coupler that delivers a 10 dB nominal coupling level and 30 dB typical directivity across the full waveguide band from 18 to 26.5 GHz. The interfaces of the directional coupler are WR-42 waveguides with UG-595/U flanges.

### Features:

- Operating Frequency 18 to 26.5GHz
- Full Band Operation
- Low Insertion Loss
- Moderate Directivity

### Applications:

- Test Labs
- Instrumentations
- Sub-assemblies

### Electrical Characteristics:

| Parameter | Min | Typ | Max | Units |
|---|---|---|---|---|
| Frequency Range | 18 | | 26.5 | GHz |
| Insertion Loss | | 0.5 | | dB |
| Coupling | | 10 | | dB |
| Coupling Accuracy | | ±2 | | dB |
| Isolation | | 40 | | dB |
| Directivity | | 30 | | dB |
| Main Line VSWR | | 1.1 | | :1 |
| Coupling Port VSWR | | 1.1 | | :1 |

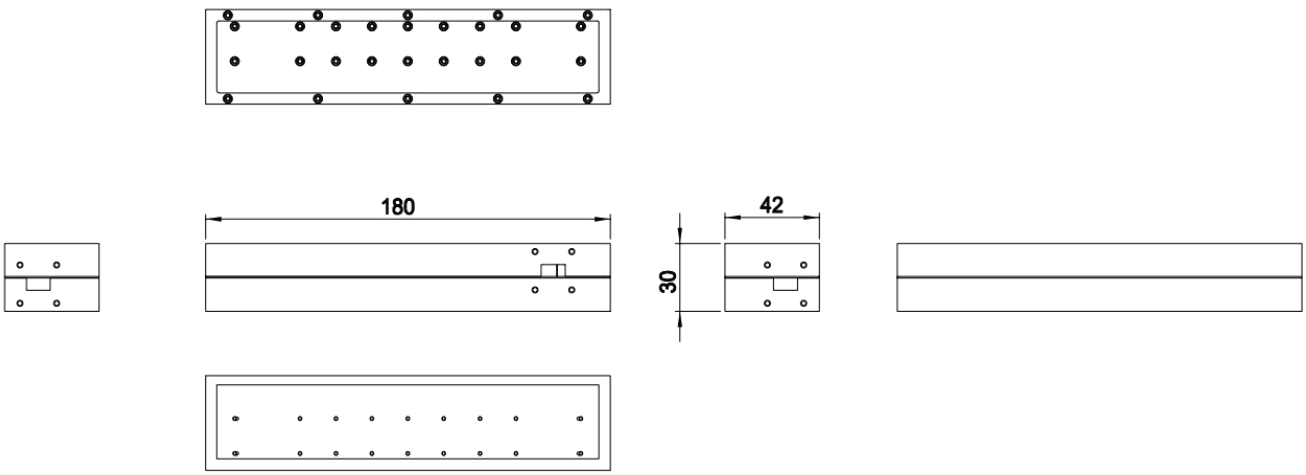
### Envrionmental And Physical Characteristics:

| Parameter | Value | Units |
|---|---|---|
| Operating Temerature | -40 To +85 | ℃ |
| Storage Temerature | -40 to +85 | ℃ |
| RF Connectors | WR-42 Waveguide with UG/595 Flange | |
| Coupled Port | WR-42 Waveguide with UG/595 Flange | |
| Size | 180*42*30 | mm |

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## Outline Drawing:

Unit:mm; Tolerance:±0.1mm




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

## Ordering Information:

| Base Number | Description | Revision |
|---|---|---|
| TC-018026-10-42 | K-band Waveguide Directional Coupler, 18-26.5GHz, Coupling:10dB Typ, WR-42/UG-595/U | Rev.1.1 |