

50 ohms 20dB SMA-Female Directional Coupler From 6GHz to 18GHz Rated at 50 Watts



Directional Coupler

- ♦ Low Insertion Loss
- ♦ Low Coupling Flatness
- ♦ High Directivity
- ♦ Excellent Reliability
- ♦ Customization available

The HRT-DQ(6000/18000)-20S is a 20dB directional coupler that operates from 6 to 18 GHz and can handle up to 50 Watts . This SMA directional coupler offers 14 dB directivity and 1.5:1 max VSWR. The package interface uses SMA on all of the ports.



Electrical Specifications

| Parameters | Units | | Specifications |
|---|-----------------------------|-----|----------------|
| Frequency Range | MHz | | 6000-18000 |
| Nominal Coupling | dB | | 20 |
| Nominal Coupling Loss | dB | | 0.04 |
| Coupling Flatness | dB | Max | ±1.0 |
| Directivity | dB | Min | 14 |
| Insertion Loss (Excluding Nominal Coupling Loss) | dB | Max | 0.6 |
| VSWR Primary | / | Max | 1.5:1 |
| VSWR Secondary | / | Max | 1.5:1 |
| Power Handling | 50 Watts cw (Forward Power) | | |

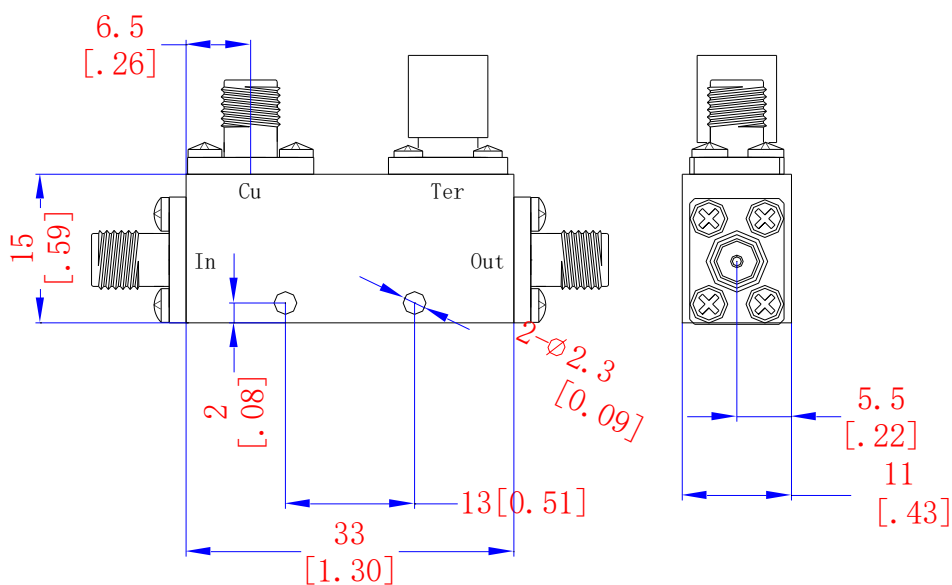
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| Mechanical Specifications | | Environmental Specification | |
|-----------------------------|--|-----------------------------|---|
| Parameter | Specification | Parameter | Specification |
| Input and Output Connectors | SMA-Female (50Ω) | Operating Temp. | -40°C to +70°C |
| Coupling Port Connector | SMA-Female (50Ω) | Storage Temp. | -55°C to +85°C |
| ROHS | Yes | Environment Class | TBD |
| Material | Aluminum (6061) | Altitude | 30,000 ft. (Epoxy Sealed Controlled environment) |
| Weight(Kg) | TBD | | |
| Surface Finish | Black Painted | Humidity | 95%RH at 40°C |
| Shock | 20G for 11msec half sine wave,3 axis both directions | | |
| Note | | | |

Outline Drawing:

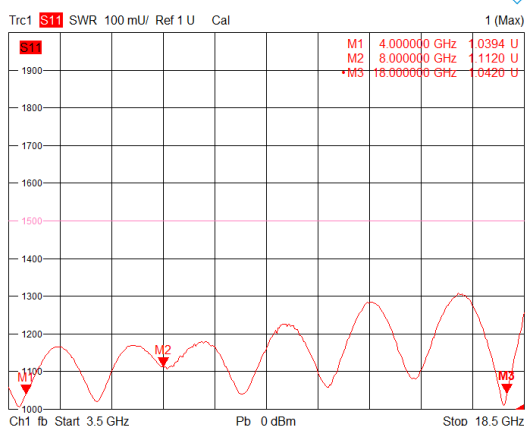
All Dimensions in mm (inches)

Outline Tolerances ± 0.3 (0.012)

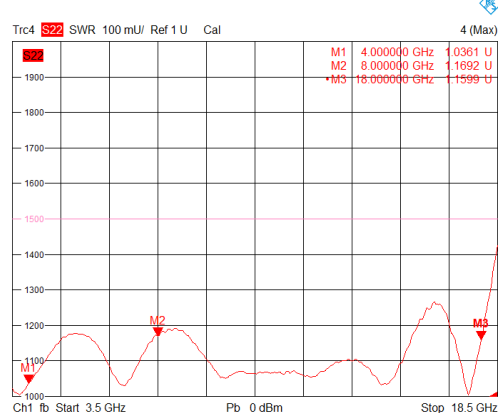


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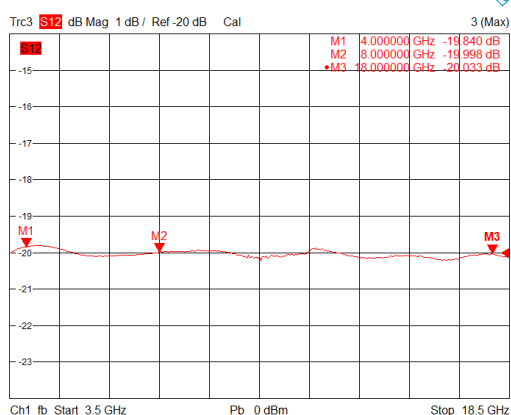
VSWR Primary



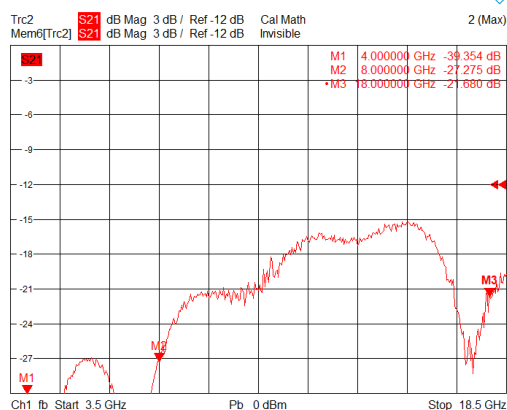
VSWR Secondary



Coupling



Directivity



Insertion Loss

