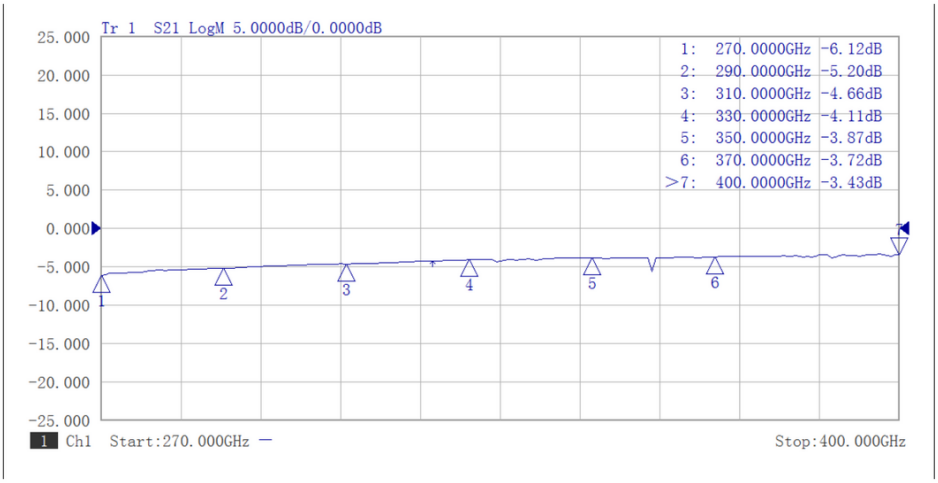
AT Microwave AT-C10-2.8V – WR-2.8 Directional Coupler

Waveguide Directional Coupler · 260–400 GHz, Coupling 10 dB · Product Datasheet

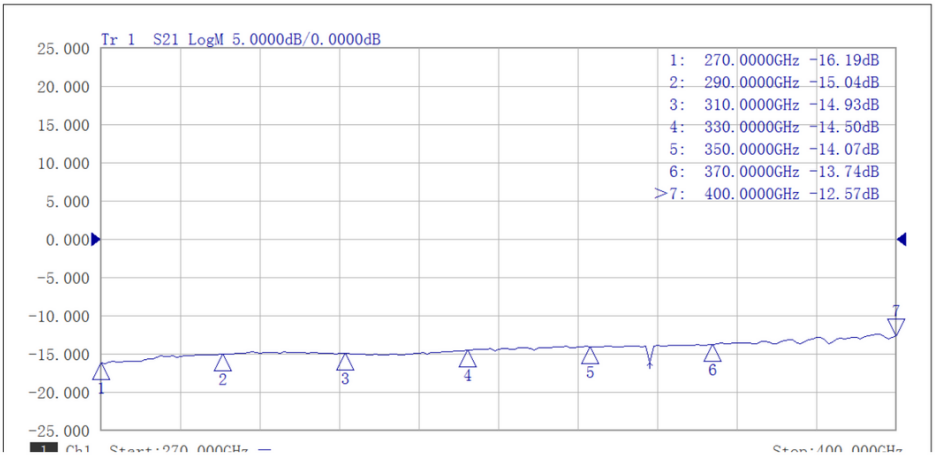
KEY FEATURES (TYPICAL, 25°C)

Parameter	Typical
Frequency Range	260 – 400 GHz (full WR-2.8 band)
Insertion Loss	-3 dB
Coupling Factor (P3/P1)	13 dB
Coupling (Factor – Insertion Loss)	10 dB
Directivity	15 dB
VSWR	1.3
Coupling Variation	±2.5 dB

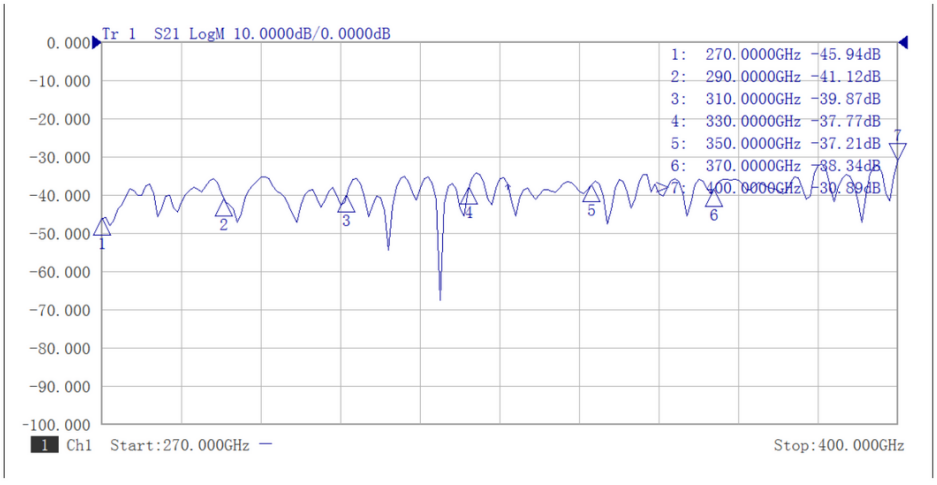
TEST DATA (25°C)



Insertion Loss vs. Frequency: -6.1 dB at 270 GHz to -3.4 dB at 400 GHz



Coupling vs. Frequency: -16.2 dB at 270 GHz to -12.6 dB at 400 GHz



Isolation vs. Frequency: typ. 31–46 dB across the band

TECHNICAL SPECIFICATIONS

- **Product Type**
  WR-2.8 Directional Coupler
- **Ports**
  WR-2.8 UG-387/U-M with Anti-Cocking Flange
- **Case Material**
  Aluminum, oxidation finish
- **Weight**
  approx. 50 g
- **Manufacturer**
  AT Microwave
- **Operating Temperature**
  -40 to +85 °C
- **Storage Temperature**
  -55 to +125 °C
- **Variant**
  20 dB coupling version available
- **Coupler Portfolio**
  Directional couplers up to 500 GHz (WR-2.2)
- **Dual-Waveguide**
  Dual-waveguide couplers up to 325 GHz

APPLICATIONS

Test Equipment Measurement setups and instrumentation up to 400 GHz	**5G/6G & THz Research** Submillimeter-wave experiments and prototyping	**Radar Systems** Signal sampling in high-frequency radar front-ends
RF over Fiber ROF links with waveguide signal monitoring	**Power Monitoring** Continuous power sampling in waveguide systems	**System Integration** Coupling stages in WR-2.8 waveguide assemblies