



**Model DC7281A, M2, M3
DC7281, M1 through M4
Dual Directional Couplers
600, 900 Watts CW
2GHz-8GHz**

The Model DC7281/DC7281A Series is a dual directional coupler with excellent frequency range and power handling capability. The wide range assures flexibility in coupling medium power amplifiers to oscilloscopes, voltmeters, power meters, spectrum analyzers and other measuring instruments. The dual directional design allows the user to monitor both forward and reflected power, a much needed characteristic in RF susceptibility testing for amplifier overdrive protection, field control and load protection. Low insertion loss allows efficient coupling to the load. The Model DC7281/DC7281A is intended for use with the 500T2G8, 2000TP2G8B and other microwave amplifiers operating within the frequency and power range.

The export classification for this equipment is EAR99. This equipment is controlled for export in accordance with the U.S. Export Administration Regulations. Diversion contrary to U.S. law is prohibited.

SPECIFICATIONS

| | |
|-----------------------------------------------|---------------------------------------------|
| FREQUENCY RANGE..... | 2-8 GHz |
| POWER (maximum) | See Model Configurations |
| COUPLING FACTOR..... | 50 dB \pm 2 dB (includes flatness) |
| COUPLING FLATNESS..... | \pm 1dB |
| DIRECTIVITY, MINIMUM | 15 dB |
| INSERTION LOSS | |
| Models with N or SC mainline connectors:..... | 2-8 GHz, 0.2dB maximum |
| Models with 7-16 mainline connectors: | 2-5.5 GHz, 0.2dB maximum |
| | 5.5-8 GHz, 0.6dB maximum |
| IMPEDANCE (Main Line) | |
| Models with N or SC mainline connectors:..... | 2-8G Hz, VSWR 1.30:1 maximum |
| Models with 7-16 mainline connectors: | 2-5.5 GHz, VSWR 1.40:1 maximum |
| | 5.5-8 GHz, VSWR 1.80:1 maximum |
| CONNECTORS | See Model Configuration |
| WEIGHT..... | 0.22 kg (.48 lbs) |
| SIZE (WxHxD)..... | 10.49 x 3.07 x 2.54 cm (4.13 x 1.21 x 1 in) |
| EXPORT CLASSIFICATION..... | EAR99 |

| Model Configurations | | | |
|----------------------|-----------------------------|----------------------------|---------------------|
| Model Number | Mainline Connector J1/J2 | Coupled Connector J3/J4 | CW Power (Watts) |
| DC7281A | N(M)/N(F) | N(F)/N(F) | 600 |
| DC7281AM2 | 7-16(M)/7-16(F) | N(F)/N(F) | 900 |
| DC7281AM3 | SC(M)/SC(F) | N(F)/N(F) | 900 |
| DC7281 | N(F)/N(F) | SMA(F)/SMA(F) | 600 |
| DC7281M1 | N(F)/N(F) | N(F)/N(F) | 600 |
| DC7281M2 | 7-16(F)/7-16(F) | N(F)/N(F) | 900 |
| DC7281M3 | SC(F)/SC(F) | N(F)/N(F) | 900 |
| DC7281M4 | SC(F)/SC(F) | SMA(F)/SMA(F) | 900 |