rf/microwave instrumentation

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 ±2 dB (includes flatness)
COUPLING FLATNESS	±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)	50 ohms
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