



**Model DC7820**  
**Dual Directional Coupler**  
**200 Watts CW**  
**33GHz–50GHz**

The Model DC7820 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.

**SPECIFICATIONS**

FREQUENCY RANGE.....	33–50 GHz
POWER (maximum) .....	200 Watts CW
COUPLING FACTOR.....	40 dB $\pm$ 2.0 dB (includes flatness)
COUPLING FLATNESS.....	$\pm$ 1.0dB
DIRECTIVITY	
Typical.....	32 dB
Minimum .....	30 dB
INSERTION LOSS .....	0.15 dB maximum
IMPEDANCE (MAIN LINE) .....	50 ohms
VSWR.....	1.10:1 maximum
CONNECTORS	
Main Line.....	WR-22 Waveguide Flange
Coupled .....	2.4mm female
WEIGHT.....	0.453 kg (1 lb)
SIZE (WxHxD).....	3.3 x 3.3 x 15.24 cm (1.3 x 1.3 x 6 in)
EXPORT CLASSIFICATION.....	EAR99