



WRD600P Power Combining System Assembly

Description

The WRD600P Power Combining System Assembly is a custom-designed RF device tailored to operate effectively across the 6 to 11 GHz frequency band. It efficiently combines power from four RF sources using a 4-way power combiner integrated with five dual broad-wall couplers, ensuring precise control over signals and power. Within the assembly, three Magic Tees govern the phase and amplitude of incoming signals, allowing for seamless and interference-free signal merging. Loaded ports with high power termination enhance signal reliability, offering backup functionality in case of source failure. The dual broad-wall couplers embedded in the assembly can either sample input signals or monitor output power, facilitating precise adjustments as required by various applications. Moreover, the output ports of the combiner are the standard WRD650. The WRD600P excels with its impressive high matching level and minimal insertion loss, making it the ideal choice for applications demanding both enhanced signal strength and optimal efficiency within the specified frequency range. Its versatility extends to critical applications like **solid state high-power amplifiers and antenna feeding networks**, where signal integrity and power optimization are paramount for reliable performance.

Electrical Specifications

Frequency	: 6.00 – 11.00 GHz
VSWR - Input	: 1.50: 1
VSWR - Output	: 1.50: 1
Insertion Loss	: 0.50 dB
Isolation	: 17.0 dB
Nominal Coupling – Forward	: 40.0 dB ± 1.0 dB
Nominal Coupling – Reverse	: 40.0 dB ± 1.0 dB
Directivity	: > 18.0 dB
Power Handling – Average	: 3.0 kW CW

Mechanical Specifications

Waveguide Size	: WRD 600P
Interface – Input Ports	: Square Grooved
Interface – Output Port	: Square Grooved
Material	: Aluminum 6061
Finish	: Silver
Paint	: Black

Contact Info :

Address:
5790 rue Donahue,
St-Laurent, QC
Canada, H4S 1C1

Phone:
(+1) 514-664-5790

Website:
www.smcq.com

email:
info@smcq.com



WRD600P Power Combining System Assembly Typical Measured Results

