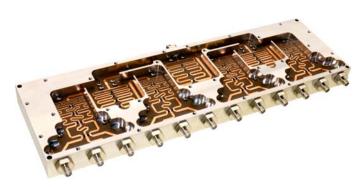
# PD2112 - Power Divider/Combiner

12 Way, SMA Female, 0.7-2.7 GHz, 40 Watts, RoHS

# **Features & Benefits**



12 way SMA wilkinson RF power splitter combiner with certified RoHS compliant construction

#### Overview

PD 2112 is a RoHS compliant, 12 way, wideband, 50 ohm, power divider, power combiner furnished with SMA female coaxial connectors. All wireless band applications in the frequency range from 700 to 2700 MHz are covered with optimal performance. Max microwave input power levels up to 40 watts can be handled in both power splitter and power combiner applications. See 12 way power divider input rating tables for additional information.

#### Electrical

The heart of the unit is a precision designed and etched Wilkinson type microstrip circuit on a low loss, high frequency, dielectric substrate. The Wilkinson microstrip circuit passes DC current to all ports making it ideal for use in active systems. Power splitter dividers passing DC to select ports and blocking DC to others are also available. A true 12 way power divider, power combiner with equal power split and balance, the PD2112's electrical performance is highlighted by 1.5 dB max insertion loss (above the -10.79)

dB power split), 18 dB min isolation, 1.45:1 max input VSWR and 1.25:1 max output VSWR. Equal power split and balance is displayed by 0.5 dB max amplitude balance and 8 degrees max phase balance. Narrow band RF performance over your frequency range may be even better. See 12 way SMA female power divider test sweeps for specific details.

#### Mechanical

Mechanical features include precision CNC turned, brass, 50 ohm SMA female coaxial connectors with tri alloy plating to insure tarnish resistance and low PIM operation. Connector pins are gold plated beryllium copper for reliability and low contact resistance. Virgin electrical grade PTFE support insulators captivate the contact pins enabling trouble free coaxial connector mating. Long term operation and superior shielding is assured by the rugged CNC machined aluminum housing with clear chemical film finish. Mounting provision is provided by four 0.15" dia (3.81 mm) thru holes. RoHS construction includes no-lead solder and a finish free of hexavalent chromium.

## Physical

ousing dimensions are 11.98" wide by 3.48" deep by 0.88" high (304.3 x 88.4 x 22.2 mm). The SMA female (jack) connectors extend 0.44" (11.1 mm) from the housing. Operating temperature range is from -65°C to +85°C. Weight is 1200 grams. See **12 way power splitter outline drawing** for more detail.

### Warranty

Each unit is 100% electrically tested to insure complete compliance with all specifications. The PD2112 power splitter, power combiner is covered by a two-year warranty.

- design
- manufacture
- direct sales



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