PD2012 - Power Divider/Combiner

12 Way, Type N Female, 0.7-2.7 GHz, 40 Watts, RoHS

Features & Benefits



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

Overview

PD 2012 is a RoHS compliant, 12 way, wideband, 50 ohm, power splitter, power combiner furnished with type-N female coaxial connectors. All wireless band applications in the frequency range from 700 to 2700 MHz are covered with optimal performance. Maximum 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 more detail.

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 PD2012'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 type N female power divider test sweeps for specific details.

Mechanical

Mechanical features include precision CNC turned, brass, 50 ohm N type female coaxial connectors with tri alloy plating to insure tarnish resistance and low PIM operation. Connector pins are gold plated phosphor bronze 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. Secure mounting is provided by four 0.15" diameter (3.81 mm) through holes. RoHS construction includes nolead 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 N-type female connectors extend 0.65" (16.5 mm) from the housing. Operating temperature range is from -65°C to +85°C. Weight is 1200 grams. See 12 way RF power splitter outline drawing for more info.

Warranty

Each unit is 100% electrically tested to insure complete compliance with all specifications. The PD2012 power splitter, power combiner is covered by a two-year warranty.

- design
- manufacture
- direct sales



50 Intervale Road Boonton, NJ 07005 USA ph: 973.335.6550 fx: 973.335.6770 email: sales@instockwireless.com

web: www.instockwireless.com