



Directional 30 dB SMA Coupler From 7 GHz to 16 GHz Rated to 50 Watts

Couplers Technical Data Sheet

PE2CP1112

Features

- 7 to 16 GHz
- 50 Watts CW Max Power
- 30 dB Coupling Value
- Directional SMA Coupler
- Meets Standards for Humidity, Shock, Vibration, Altitude

Applications

- Communications Systems
- CDMA, GSM, LTE
- Amplifier Systems
- Amplifier Power Dividing
- Aviation/Aerospace
- Defense Applications
- Wireless Telecommunications

Description

The PE2CP1112 is a 30 dB RF coupler with 50 ohm SMA connectors operating from 7 to 16 GHz with a maximum input power of 50 Watts CW, and peak power handling of 3 kilowatt. The PE2CP1112 has a coupling factor of 30 dB, insertion loss of 0.4 dB (excluding coupled power) and a maximum VSWR of 1.4:1. The coupler operates over a temperature range of -55° to 105° C and meets environmental standard for humidity, shock, vibration, and altitude. Couplers have many Applications and perform several functions within the RF/Microwave industry such as circuit feedback and signal sampling for measurement or monitoring.

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	7		16	GHz
Impedance		50		Ohms
Coupling	29	30	31	dB
Frequency Sensitivity		±0.3	±0.5	dB
Insertion Loss			0.4	dB
Directivity	12	15		dB
Main Line VSWR		1.3:1	1.4:1	
Input Power (CW)			50	Watts
Input Power (Peak)			3	kWatts

Mechanical Specifications

Size

Length	1 in [25.4 mm]
Width/Dia.	0.38 in [9.65 mm]
Height	0.5 in [12.7 mm]

Finish	Gray
Housing Material and Plating	Aluminum

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Directional 30 dB SMA Coupler From 7 GHz to 16 GHz Rated to 50 Watts PE2CP1112](#)



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Input Connector	SMA Female
Output Connector	SMA Female
Coupled Connectors	SMA Female

Environmental Specifications

Temperature

Operating Range	-55 to +105 deg C
Storage Range	-55 to +125 deg C

Humidity	100% RH at 35°C, 95% RH at 40°C
Shock	20G for 11msec half sine wave, 3 axis both directions
Vibration	25g RMS (15 degrees 2KHz) endurance, 1 hour per axis
Altitude	30,000 ft. (Epoxy Sealed Controlled environment)

Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Notes:

Directional 30 dB SMA Coupler From 7 GHz to 16 GHz Rated to 50 Watts from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

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URL: <https://www.pasternack.com/directional-30-db-sma-coupler-16-ghz-pe2cp1112-p.aspx>

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