

# FMCP1145-10 DATA SHEET

# SMA Dual Directional Coupler 10 dB from 500 MHz to 1000 MHz Rated to 50 Watts

Couplers are indispensable components for isolating, separating and combining signals. For example, they provide a simple way of sampling microwave signals. They also can make accurate attenuator measurements since reflections are eliminated. The PE2CP1146-30 is a 30 dB dual-directional coupler that operates from 500 to 1,000 MHz and can handle up to 500 Watts (CW) with 20 dB directivity minimum and 1.2:1 VSWR maximum. The package interface uses SMA female connectors.

The PE2CP1146-30 is part of Pasternack's family of directional/dual-directional couplers that offer coupling ratios up to 50 dB with excellent performance featuring high directivity, low insertion loss and VSWR. They are available in both narrow and broad bandwidths and can be used in a wide variety of applications including signal sampling, VSWR measurements, power combining and distribution.

### **Electrical Specifications**

Description	Min	Тур	Max	Units
Frequency Range	500		1,000	MHz
Impedance		50		Ohms
Coupling	8.75	10	11.25	dB
Freq. Sensitivity		±0.7	±0.75	dB
Insertion Loss		1.8	2	dB
Directivity	20	22		dB
Main Line VSWR		1.15:1	1.2:1	
Sec. Line VSWR		1.15:1	1.2:1	
Input Power (CW)			50	Watts

Input Power (Peak) 10% Duty Cycle, 1us PW kWatts

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## **Mechanical Specifications**

Size

 Length
 9.75 in [247.65 mm]

 Width/Dia.
 3.51 in [89.15 mm]

 Height
 1.053 in [26.75 mm]

 Weight
 0.79 lbs [358.34 g]

Housing Material and Plating Aluminum

Configuration

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

#### **Environmental Specifications**

**Temperature** 

Operating Range -40 to +85 deg CStorage Range -50 to +105 deg C

Humidity 100% RH at 35°C, 95%RH at 40°C Shock 20G for 11msec half sine wave, 3 axis

both directions



#### Features:

- Dual-Directional Coupler
- SMA Female Connectorized Design
- 500 to 1,000 MHz Frequency Range
- Coupling 10±1.25 dB
- Directivity > 20 dB
- Low VSWR < 1.2:1
- Max Power 50 Watts (CW)

## **Applications:**

- Test and Measurement
- Military Communications
- Commercial Communications
- Wireless Communications
- SATCOM

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Vibration Altitude 25g RMS (15 degrees 2KHz) endurance, 1 hour per axis 30,000 ft.

**Compliance Certifications** (see product page for current document)

#### **Plotted and Other Data**

Notes:

SMA Dual Directional Coupler 10 dB from 500 MHz to 1000 MHz Rated to 50 Watts from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: SMA Dual Directional Coupler 10 dB from 500 MHz to 1000 MHz Rated to 50 Watts FMCP1145-10

URL: https://www.fairviewmicrowave.com/directional-standard-10-db-500-mhz-to-1-ghz-fmcp1145-10-p.aspx

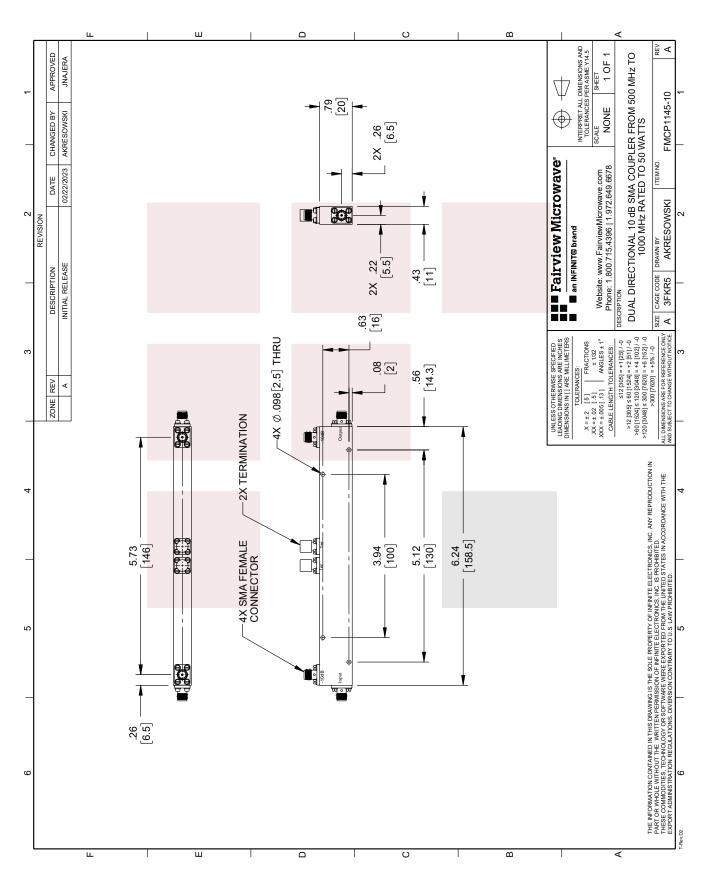
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