



Directional 6 dB SMA Coupler To 3 GHz Rated to 50 Watts

Couplers Technical Data Sheet

PE2242A-06

Features

- Directional Coupler
- 0.5 to 3 GHz Frequency Range
- Coupling 6 ± 1.5 dB
- Directivity > 18 dB
- VSWR < 1.3:1
- Max Power 50 Watts (CW)

Applications

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

Description

Directional 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 PE2242A-06 is a 6 dB directional coupler that operates from 0.5 to 3 GHz and can handle up to 50 Watts (CW) with 18 dB directivity minimum and 1.3:1 VSWR maximum. The package interface uses SMA female connectors, and is also REACH and RoHS compliant.

The PE2242A-06 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	Minimum	Typical	Maximum	Units
Frequency Range	0.5		3	GHz
Impedance		50		Ohms
Coupling		6 ± 1.5		dB
Insertion Loss			1.8	dB
Directivity	18			dB
Main Line VSWR			1.3:1	
Secondary Line VSWR			1.3:1	
Input Power (CW)			50	Watts

Electrical Specification Notes:
Values at 25°C, sea level.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Directional 6 dB SMA Coupler To 3 GHz Rated to 50 Watts PE2242A-06](#)



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Mechanical Specifications

Size

Length	4.72 in [119.89 mm]
Width/Dia.	0.4 in [10.16 mm]
Height	1.18 in [29.97 mm]

Finish

Blue

Housing Material and Plating

Aluminum

Configuration

Package Type	Connectorized
Input Connector	SMA Female
Output Connector	SMA Female
Coupled Connectors	SMA Female

Environmental Specifications

Temperature

Operating Range	-30 to +85 deg C
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Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Notes:

Directional 6 dB SMA Coupler To 3 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.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Directional 6 dB SMA Coupler To 3 GHz Rated to 50 Watts PE2242A-06](#)

URL: <https://www.pasternack.com/directional-6-db-sma-coupler-3-ghz-pe2242a-06-p.aspx>

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