



Part Number: PD-DCT45G

NuPhotonics

Rev. 0.8 – Feb. 2024

Part Number: PD-DCT45G
Product State: Production Build

DC-45 GHz Power Divider

Description

A resistive power divider built onto a low loss ceramic substrate hermetically packaged in a Kovar body. This is ideal for applications that want a small package and broadband operation that offers flat performance that is critical for success.

Features

- Hermetic Package
- Field replaceable 2.4 mm connector
- Flat Performance
- Low loss
- Ruggedized design.
- Frequency Stable over temperature



Applications

- Measurement
- Radar
- Antenna arrays



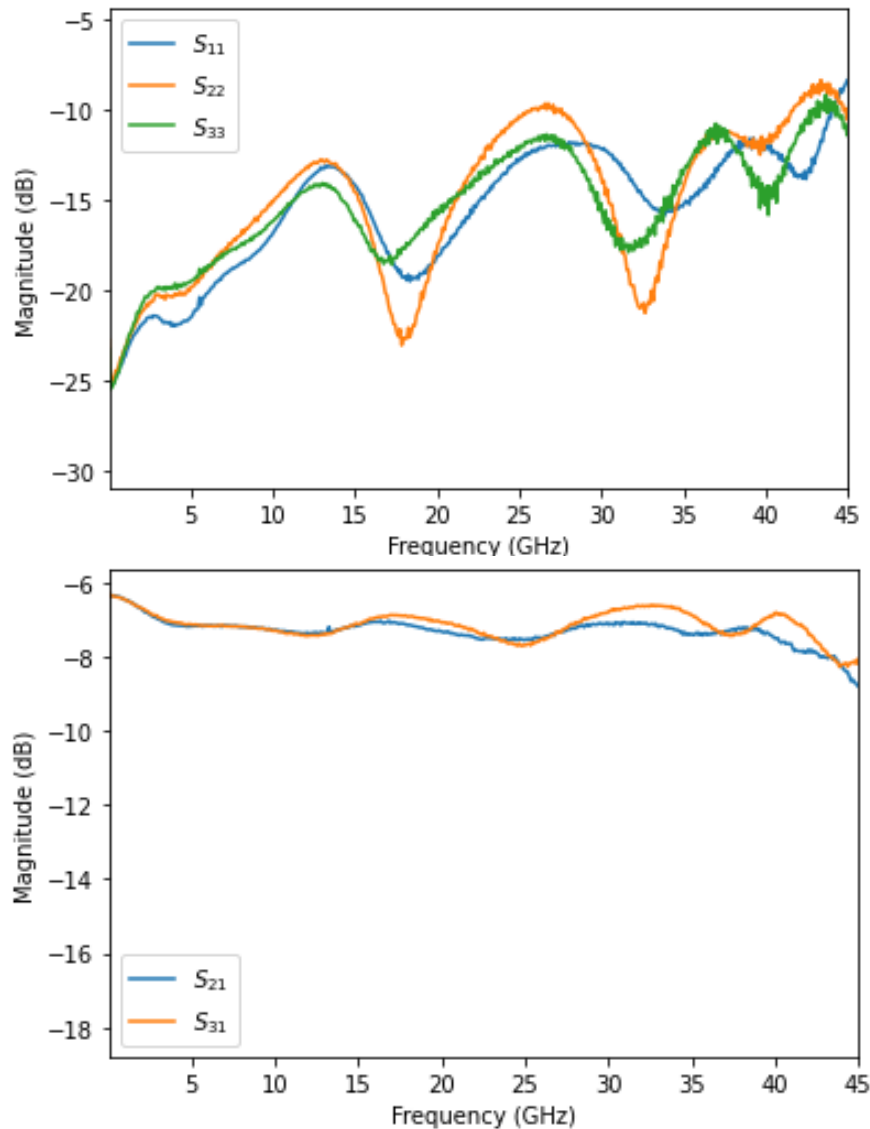
IMPORTANT NOTICE: more Information on warranty, changes, rights, notices, and other information are presented at the end of this data sheet. If the sheet is not present, refer to www.nuphotonics.com for the company issued data sheet.

Electrical Specifications ($T_{op} 23 \pm 3^{\circ}C$, unless otherwise specified)

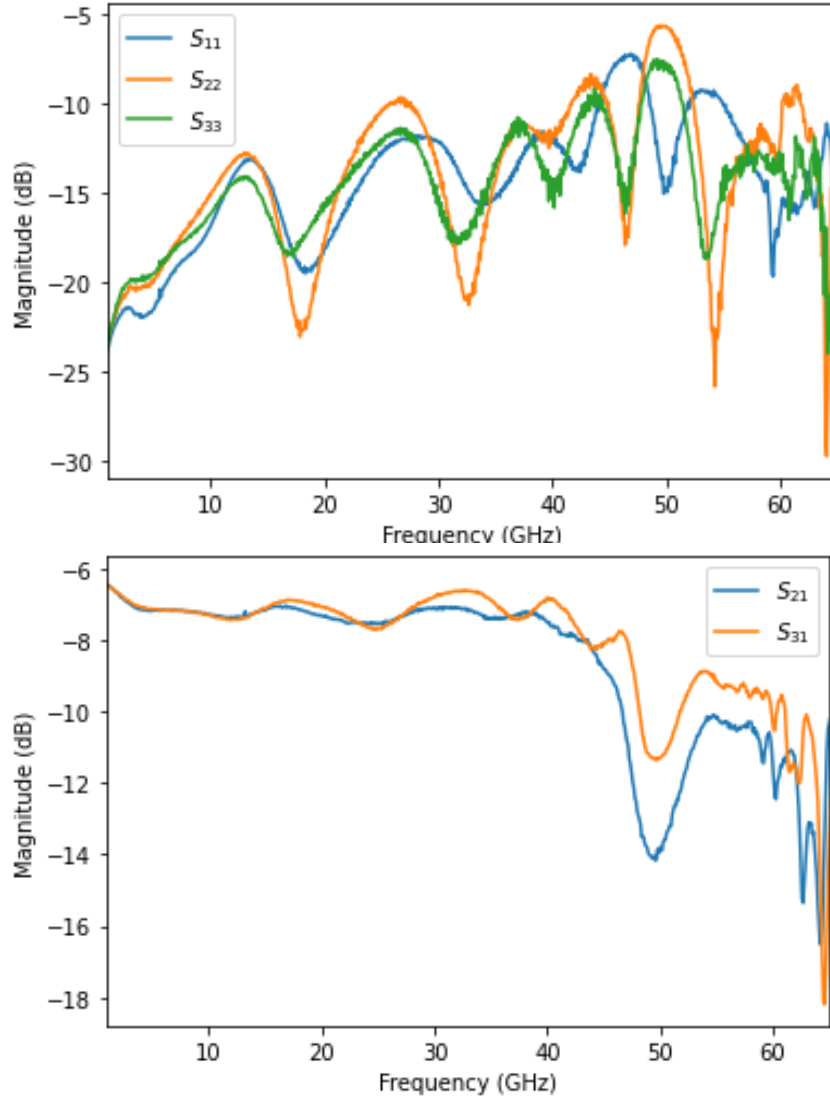
Parameter	Min.	Typ.	Max.	Unit	Test Conditions
Nominal Power Splitting		6		dB	
Excess Insertion Loss		0.8		dB	
Isolation		7		dB	Equivalent to Insertion Loss
Return Loss	13	20	70	dB	DC- 30 GHz
	10	15			30-45 GHz

Typical Electrical Specifications. Insertion loss may vary up to +/- 0.5 dB

Typical Measured Performance



Extended Measurement Data: 1.85mm connector build.



Device Dimensions

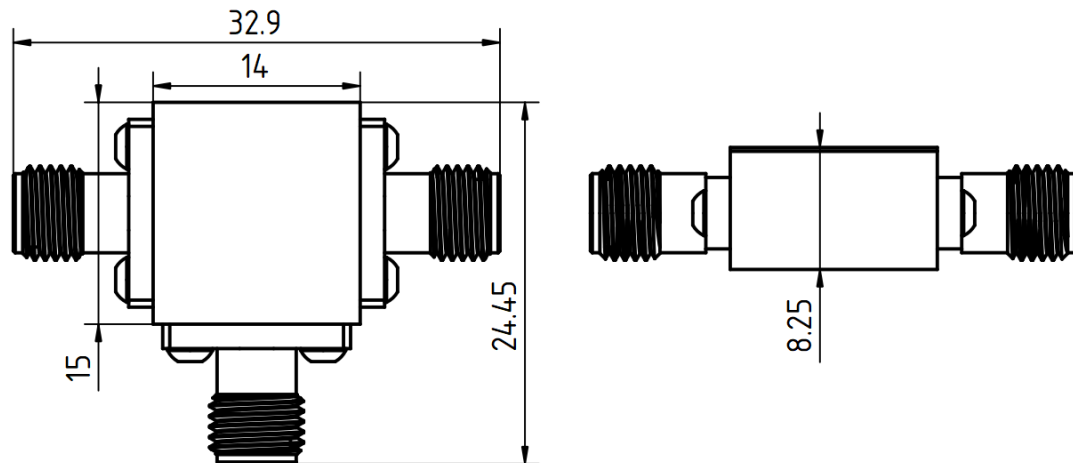
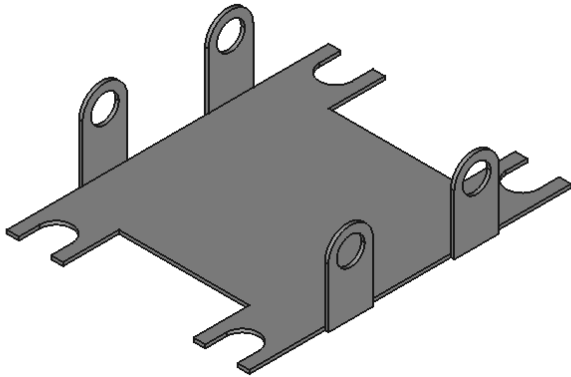
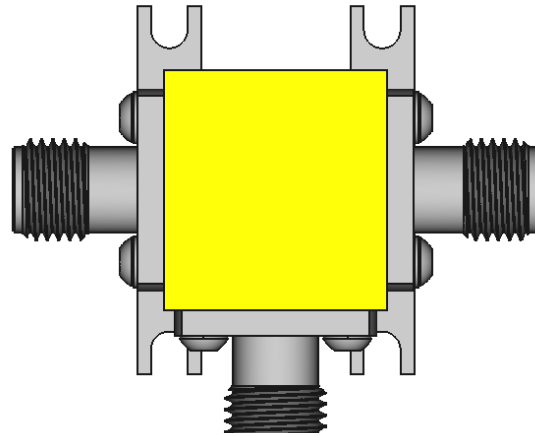


Figure 1. All units in mm. Manufactured device sizes may differ.

Optional Mount: If it is desirable to mechanically fix the device in place. An optional Mount can be added to the device.



(a) Mount



(b) Mount on the device

Inquiry Information

Sales: All inquiries regarding sales please contact Sales@NuPhotonics.com

General: If you are interested in a custom solution, general information, or engineering related information please contact Inquiry@NuPhotonics.com



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Definitions: Product State

Alpha Build: Devices in Alpha build are in internal engineering build and testing stages. Major changes may happen for production build.

Beta Build: Devices in Beta build are for external customer and engineering sample testing stages. Minor changes may happen for production build.

Production Build: Customer ready devices. Small appearance changes may occur between devices.

Obsolete: Currently not supported.