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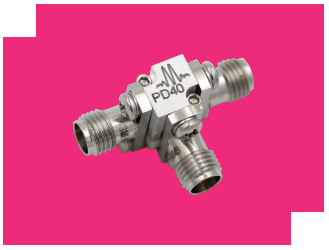
PD-0040

Resistive Power Divider

DEVICE OVERVIEW

General Description

The PD-0040 is a resistive 2-way power divider that features broadband operation from DC to 40 GHz. Resistive power dividers offer 6 dB nominal insertion loss and excellent amplitude and phase balance. Resistive power dividers are not recommended for use as a power combiner due to the lack of isolation.



Download s-parameters here

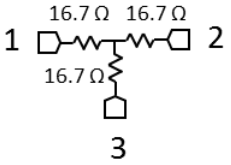
Features

- DC to 40 GHz In-phase Power Splitting
- 0.75 dB Typical Insertion Loss
- Outstanding Phase and Amplitude Balance

Applications

N/A

Functional Block Diagram



Part Ordering Options

Part Number	Description	Connectors	Green Status	Product Lifecycle	Export Classification
PD-0040	Resistive Power Divider	Standard	REACH RoHS	Released	EAR99

Table Of Contents

Revision History

Revision Code	Revision Date	Comment
-	2009-11-01	Datasheet initial Release
A	2019-09-01	Updated Circuit

Port Configuration and Functions

Port Functions

Port	Function	Connector Type	Description	DC Equivalent Circuit
1	In/Out 1	2.92F	RF input/output 1 of the combiner.	-
2	In/Out 2	2.92F	RF input/output 2 of the combiner	-
3	In/Out 3	2.92F	RF input/output 3 of the combiner	-

Specifications

Absolute Maximum Ratings

Parameter	Maximum Rating	Unit
RF Power Handling	0.5	W
Minimum Operating Temperature	-55	°C
Maximum Operating Temperature	100	°C
Minimum Storage Temperature	-65	°C
Maximum Storage Temperature	150	°C

Package Information

Parameter	Details	Rating
Weight	-	9g
Dimensions	-	14.0 × 7.87 mm

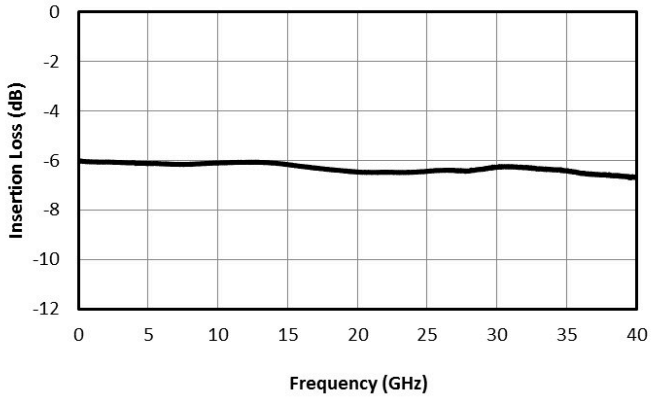
Electrical Specifications

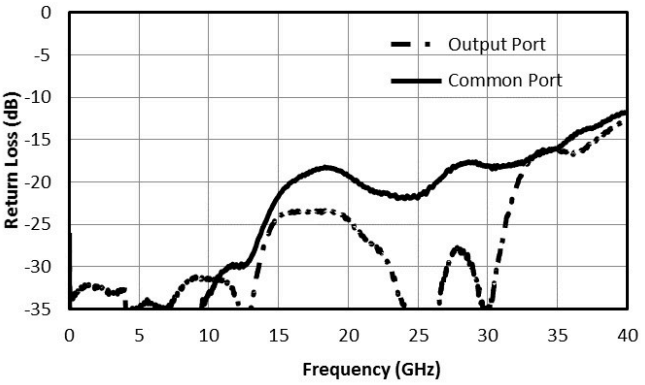
Specifications guaranteed from -55 to +100°C, measured in a 50Ω system.

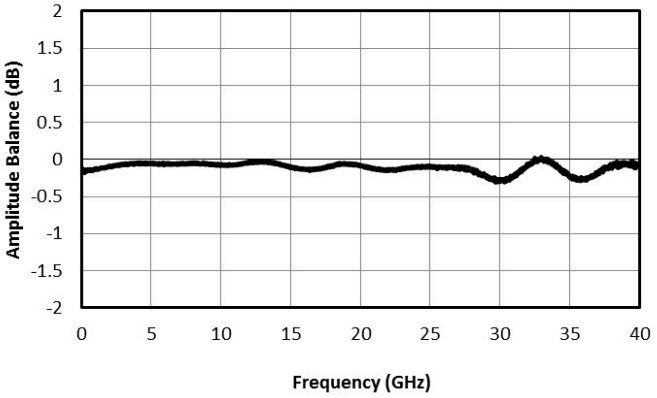
Parameter	Test Conditions	Minimum Frequency (GHz)	Maximum Frequency (GHz)	Min	Typ	Max	Unit
Amplitude Balance	-	0	40	-	0.25	0.75	dB
Excess Insertion Loss [1]	-	0	40	-	0.75	-	dB
Nominal Phase Shift	-	0	40	-	0	-	°
Nominal Power Splitting	-	0	40	-	6	-	dB
Phase Balance	-	0	40	-	2	8	°
VSWR	-	0	40	-	1.3	-	

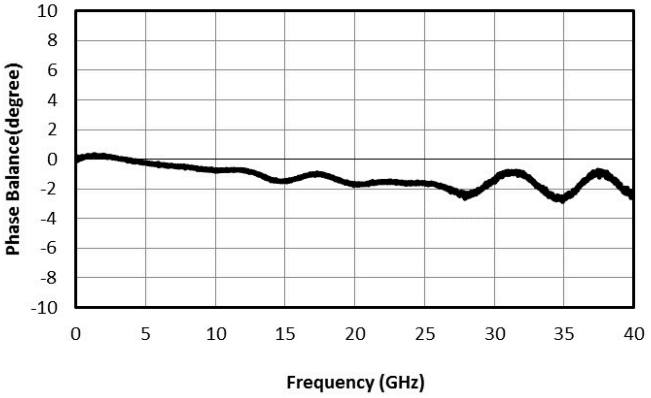
[1] Excess Insertion Loss = (Input Port to Common Port Insertion Loss) - 6dB

Typical Performance Plots





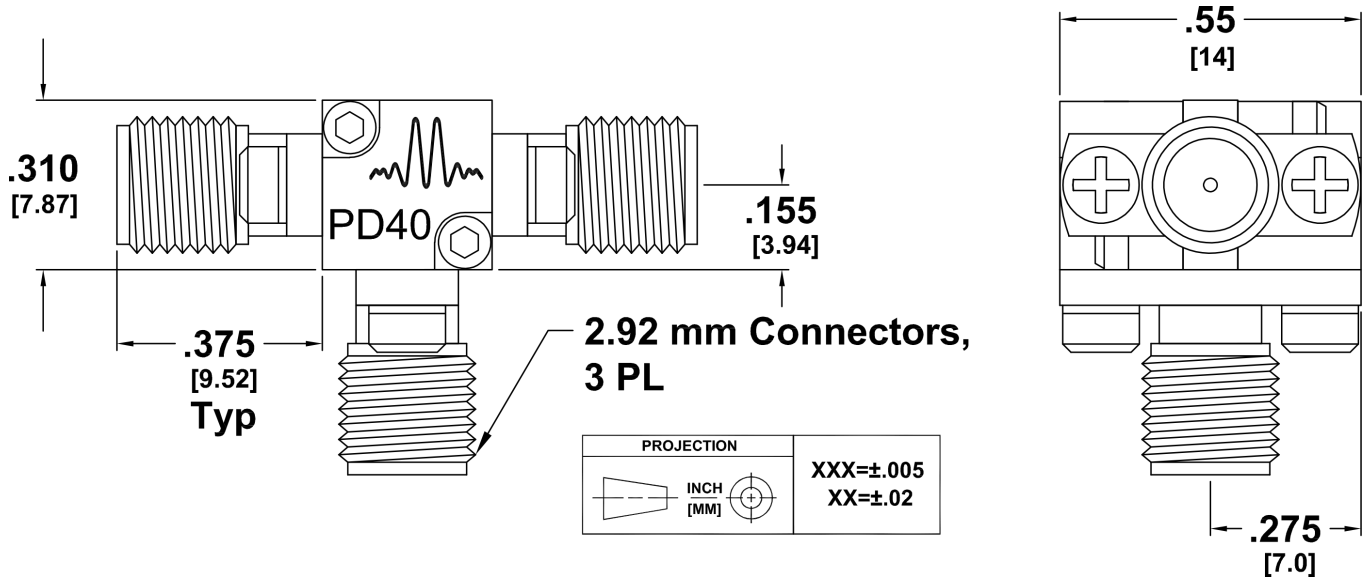




Mechanical Data

Outline Drawing

Download : Outline 2D Drawing | Outline 3D Drawing | Outline 3D STP



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