

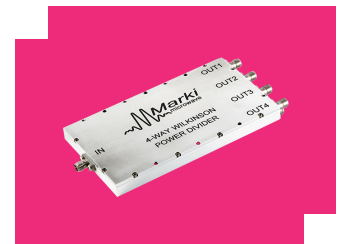
PD4-0126

4-Way Wilkinson Power Divider

DEVICE OVERVIEW

General Description

4-Way Wilkinson power dividers can be used for both in-phase power splitting and power combining applications. These power dividers are realized as a cascade of two 1:2 Wilkinson power dividers integrated into a single package. 4-Way Wilkinson power dividers feature the lowest insertion loss (ideally 4 dB 4-way splitting loss), excellent amplitude and phase balance, and high isolation across the entire operating band.



[Download s-parameters here](#)

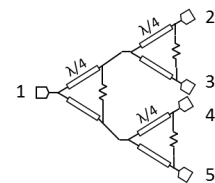
Features

- 1 to 26.5 GHz In-phase Power Splitting
- Outstanding Output to Output Isolation
- Outstanding Phase and Amplitude Balance

Applications

N/A

Functional Block Diagram



Part Ordering Options

Part Number	Description	Package	Packing Size	Green Status	Product Lifecycle	Export Classification
PD4-0126	4-Way Wilkinson Power Divider	-	-	RoHS	Released	EAR99

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Revision History

Revision Code	Revision Date	Comment
E	2020-10-01	RoHS Assembly

Port Configuration and Functions

Port Functions

Port	Function	Description	Equivalent Circuit for Package
In	Divider Common Input	Wilkinson Divider Common Input	-
Out 1	Divider Output 1	RF divided output 1 of the Wilkinson divider.	-
Out 2	Divider Output 2	RF divided output 2 of the Wilkinson divider.	-
Out 3	Divider Output 3	RF divided output 3 of the Wilkinson divider.	-
Out 4	Divider Output 4	RF divided output 4 of the Wilkinson divider.	-

Specifications

Absolute Maximum Ratings

Parameter	Maximum Rating	Unit
RF Power Handling as a Power Combiner	1	W
RF Power Handling as a Power Divider	10	W

Package Information

Parameter	Details	Rating
Weight	-	220g
Dimensions	-	120.4 × 67.3 mm

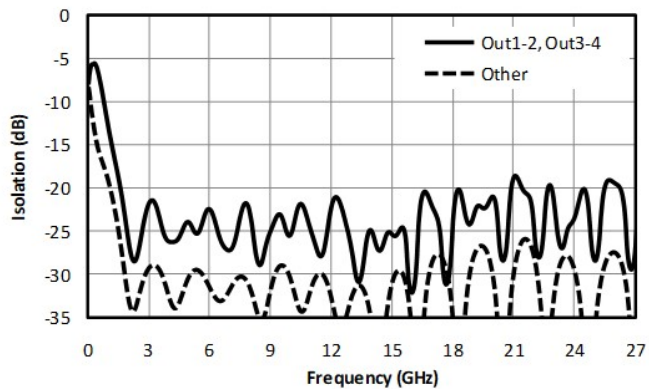
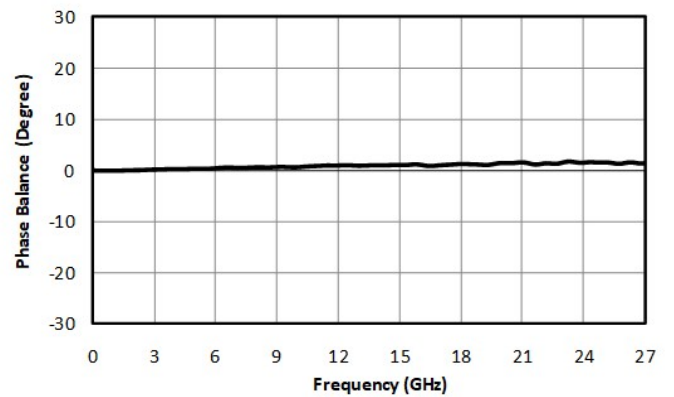
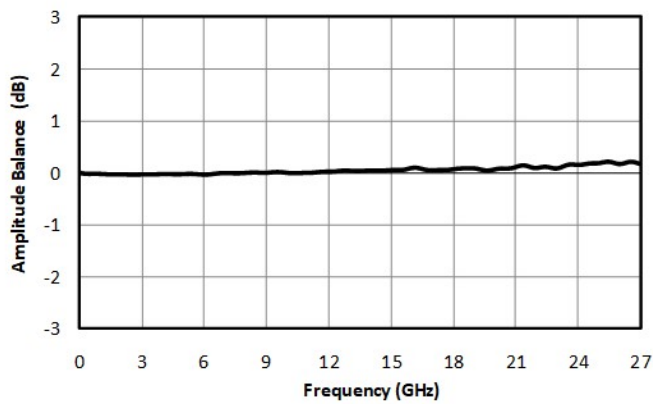
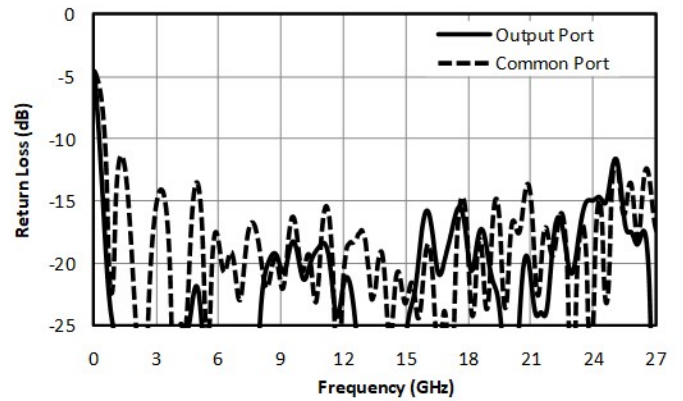
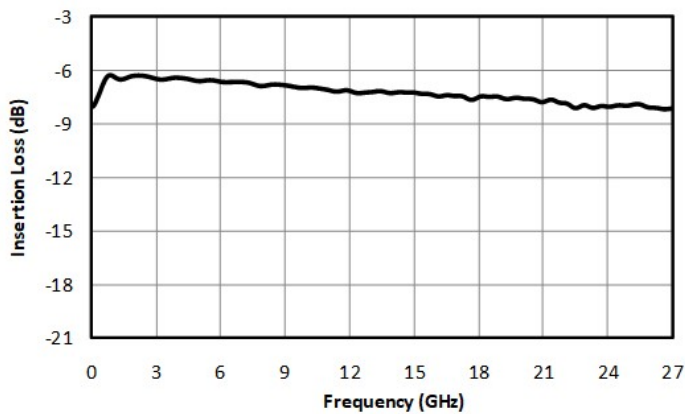
Electrical Specifications

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
Phase Balance	-	1	26.5	-	3	10	°
Insertion Loss ¹	-	1	26.5	-	1.5	-	dB
VSWR	-	1.8	26.5	-	1.5	-	-
Isolation	-	1	1.6	10	25	-	dB
Isolation	-	1.6	26.5	15	-	-	dB
Weight	-	-	-	-	220	-	g
Amplitude Balance	-	1	26.5	-	0.3	0.9	dB
Nominal Phase Balance	-	1	26.5	-	0	-	°
Nominal Power Splitting (dB)	-	1	26.5	-	6	-	dB

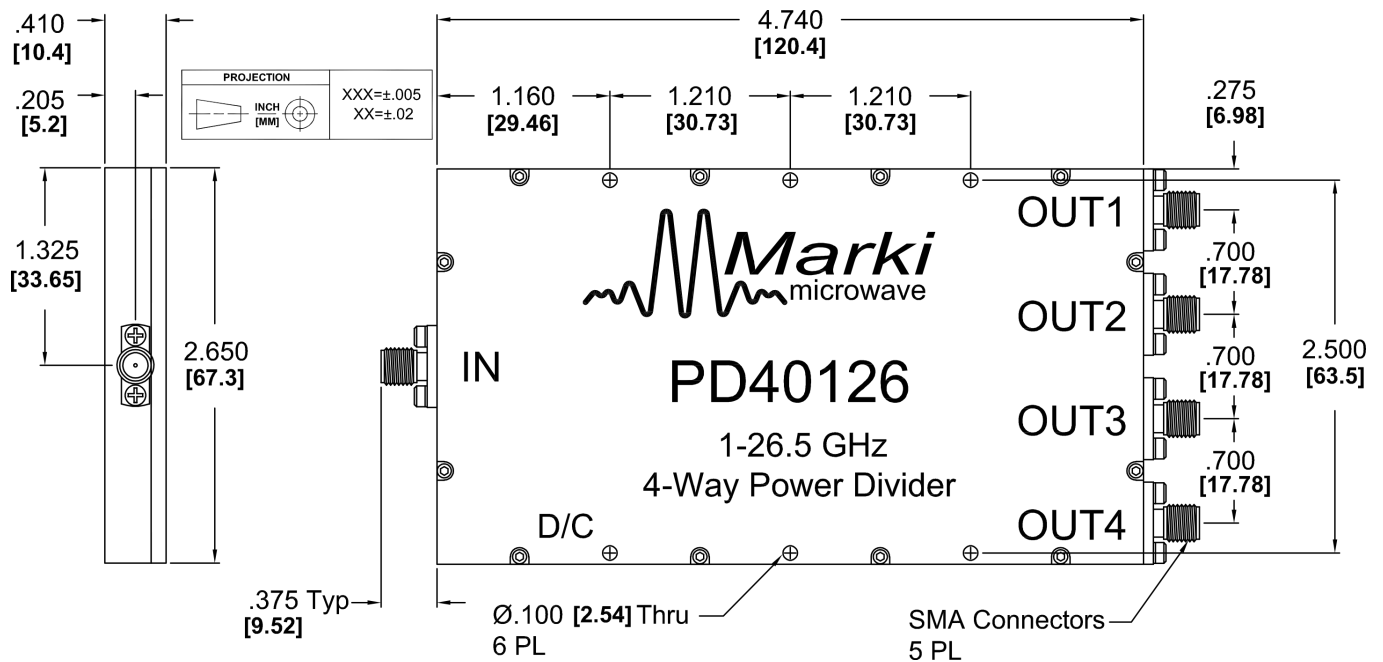
^[1] Excess Insertion Loss = (Input Port to Common Port Insertion Loss) - 6dB

Typical Performance Plots



Mechanical Data

Outline Drawing



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