

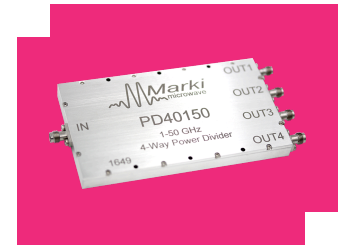
# PD4-0150

## Ultra-Wideband 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.



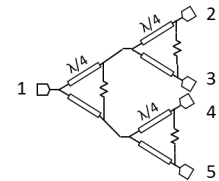
#### Features

- 1 to 50 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	Connectors	Green Status	Product Lifecycle	Export Classification
PD4-0150	Ultra-Wideband 4-Way Wilkinson Power Divider	<u>Standard</u>	REACH RoHS	Released	EAR99

**Table Of Contents**

- **Device Overview**
  - General Description
  - Features
  - Applications
  - Functional Block Diagram
- **Port Configuration and Functions**
  - Port Functions
- **Revision History**
- **Specifications**
  - Absolute Maximum Ratings
  - Package Information
  - Electrical Specifications
  - Typical Performance Plots
- **Mechanical Data**
  - Outline Drawing

**Revision History**

Revision Code	Revision Date	Comment
-	2018-11-27	Datasheet Initial Release
A	2025-12-17	Power Handling Updated

**Port Configuration and Functions**

**Port Functions**

Port	Function	Connector Type	Description	DC Equivalent Circuit
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.

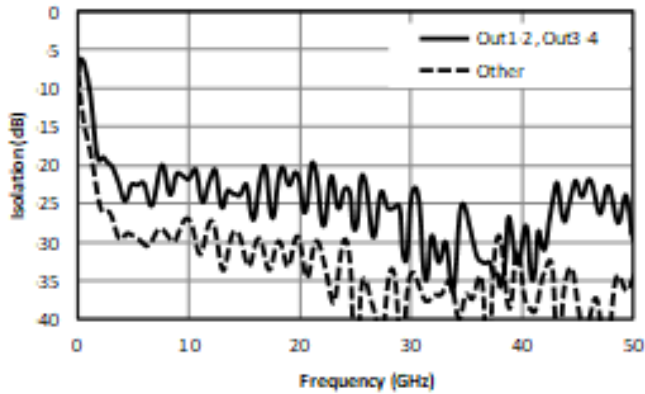
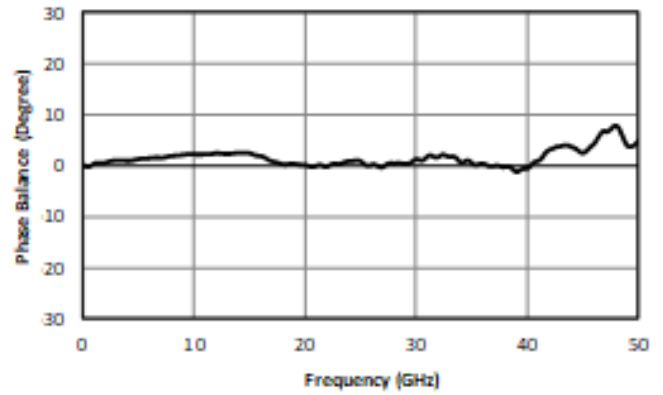
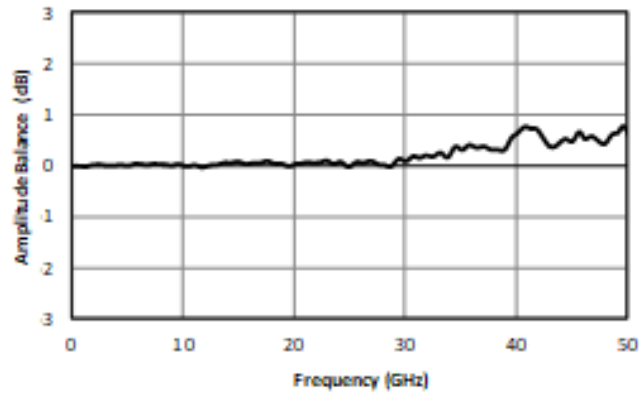
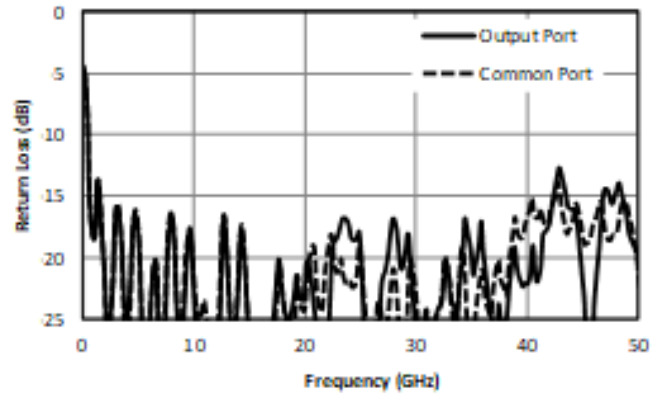
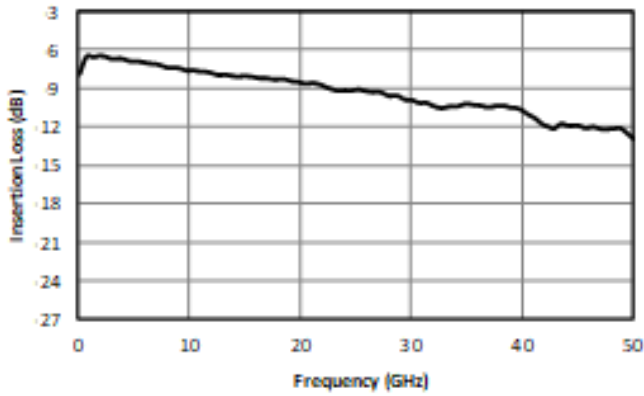
Parameter	Test Conditions	Minimum Frequency (GHz)	Maximum Frequency (GHz)	Min	Typ	Max	Unit
Amplitude Balance	-	1	50	-	0.5	1.5	dB
Excess Insertion Loss <sup>1</sup>	-	1	50	-	4	-	dB
Isolation	-	1	1.6	9	20	-	dB
Isolation	-	1.6	50	16	-	-	dB
Nominal Phase Shift	-	1	50	-	0	-	°
Nominal Power Splitting	-	1	50	-	6	-	dB
VSWR	-	1	50	-	1.55	-	
Phase Balance	-	1	50	-	5	18	°

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

# PD4-0150

## Ultra-Wideband 4-Way Wilkinson Power Divider

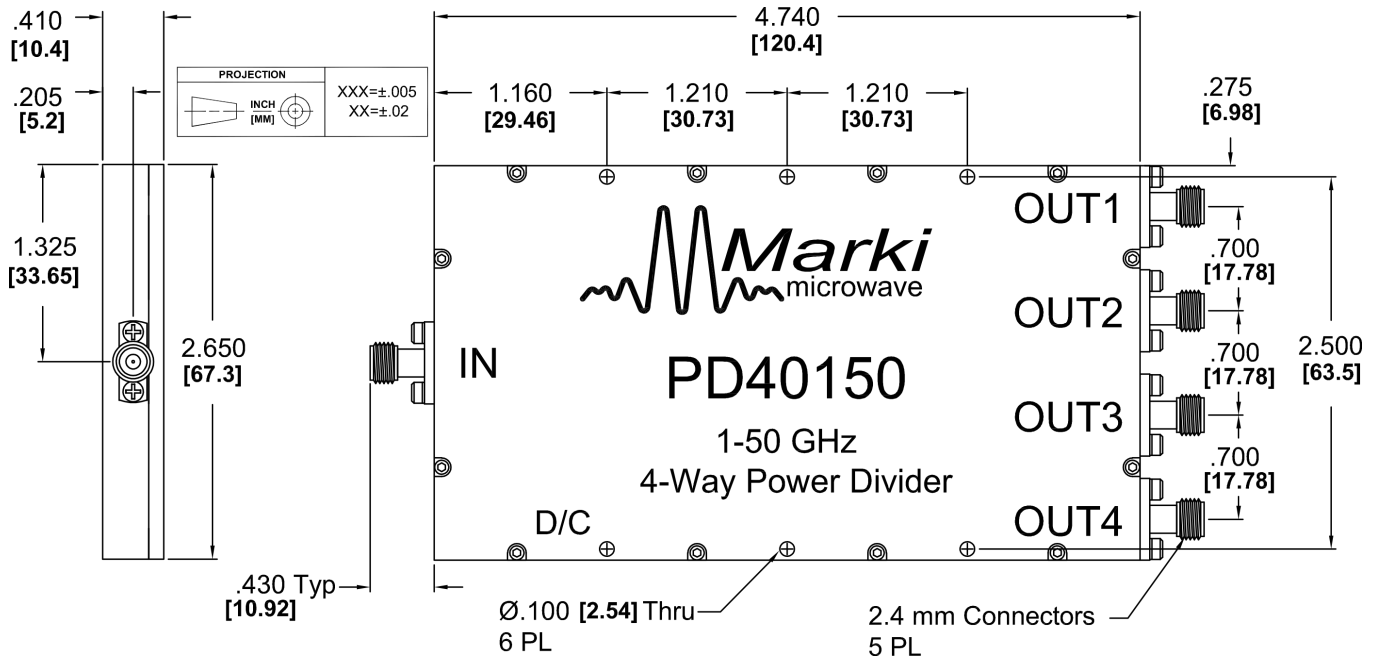
### Typical Performance Plots



**Mechanical Data**

**Outline Drawing**

Download : [Outline 2D Drawing](#) | [Outline 3D Drawing](#) | [Outline 3D STP](#)



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