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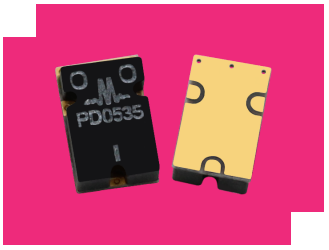
PD-0535SM

Wilkinson Power Divider

DEVICE OVERVIEW

General Description

2-Way Wilkinson power dividers can be used for both in-phase power splitting and power combining applications. These power dividers feature the lowest insertion loss (ideally 3 dB splitting loss), excellent amplitude and phase balance, and high isolation across the entire operating band. High isolation can be critically important for power combining applications, such as when performing accurate intermodulation distortion (IMD) tests.



Download s-parameters here

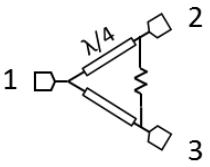
Features

- 5 to 35 GHz In-phase Power Splitting
- 1.5 dB Typical Insertion Loss
- 18 dB Typical Output to Output Isolation
- Outstanding Amplitude and Phase Balance
- Surface Mount Package

Applications

N/A

Functional Block Diagram



Part Ordering Options

Part Number	Description	Package	Green Status	Product Lifecycle	Export Classification
PD-0535SM	Wilkinson Power Divider	SM	Non-RoHS	Released	EAR99
EVAL-PD-0535SM	Evaluation Board, 5 - 35 GHz Wilkinson Power Divider	EVAL	Non-RoHS	Released	EAR99

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Revision History

Revision Code	Revision Date	Comment
G0	2025-12-17	Power Handling Updated

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
Dimensions	-	3.81 x 6.10 mm
Moisture Sensitivity Level	-	MSL 3

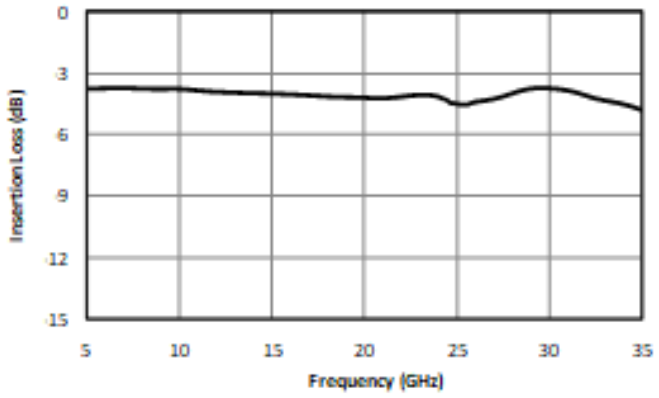
Electrical Specifications

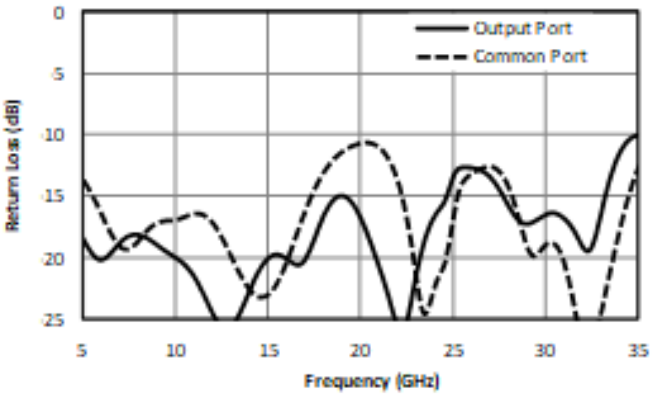
Specifications guaranteed from -55 to +100°C, measured in a 50Ω system.

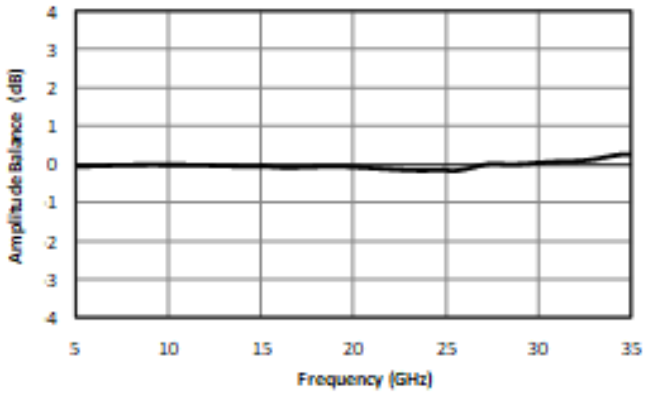
Parameter	Test Conditions	Minimum Frequency (GHz)	Maximum Frequency (GHz)	Min	Typ	Max	Unit
Amplitude Balance		5	35	-	0.25	-	dB
Insertion Loss [1]	-	5	35	-	1.5	3	dB
Isolation [2]		5	35	-	18	-	dB
Nominal Phase Shift		5	35	-	0	-	°
Nominal Power Splitting (dB)	-	5	35	-	3	-	dB
Phase Balance		5	35	-	3	-	°
VSWR		5	35	-	1.5	-	

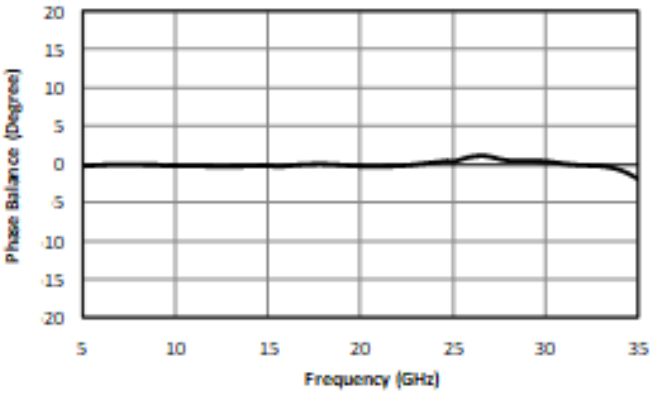
[1][2] Excess Insertion Loss = (Input Port to Common Port Insertion Loss) - 3dB

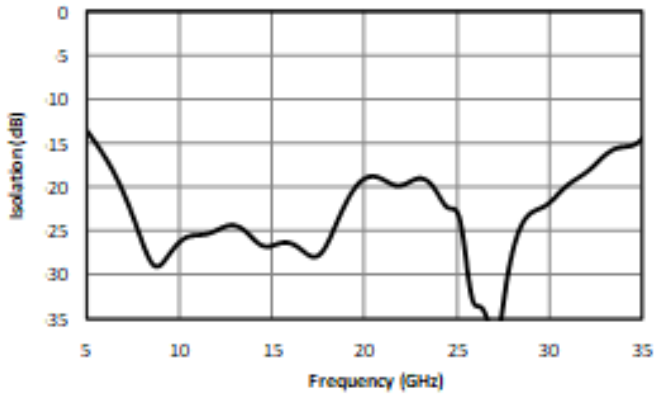
Typical Performance







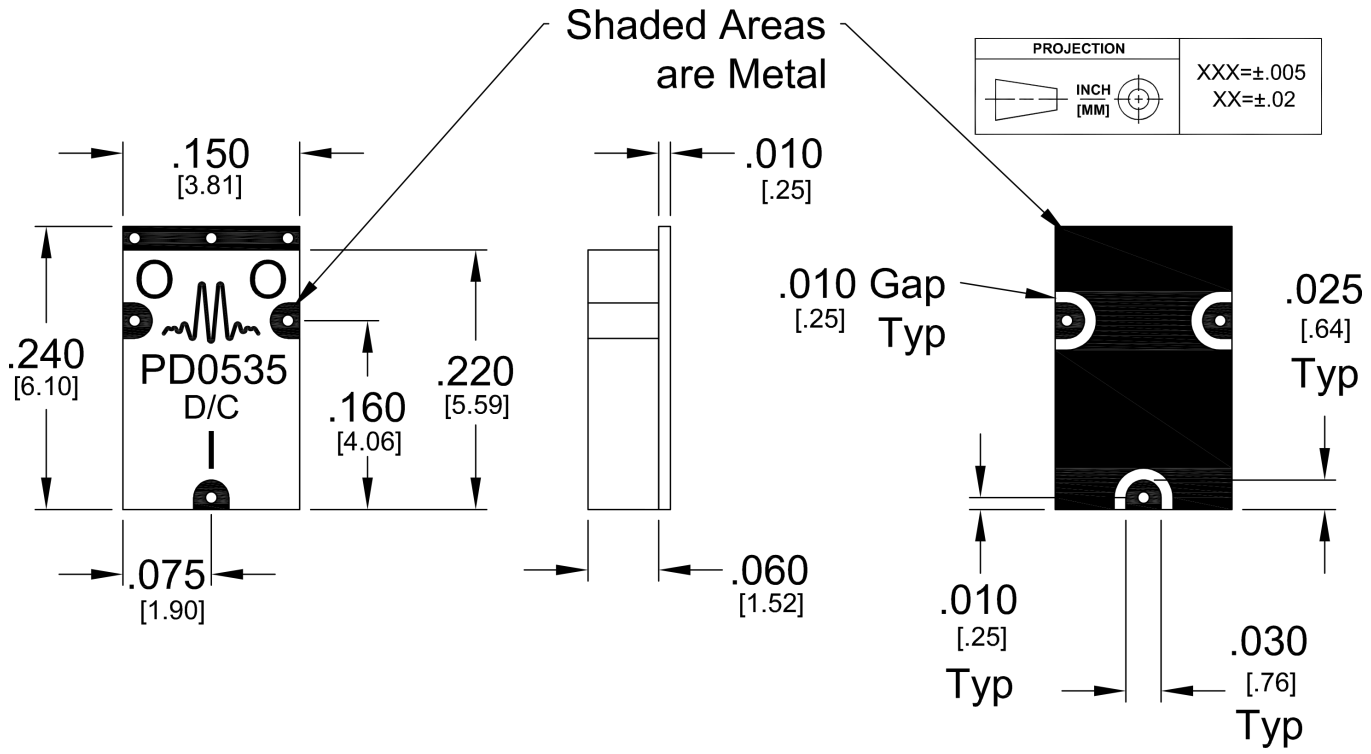




Mechanical Data

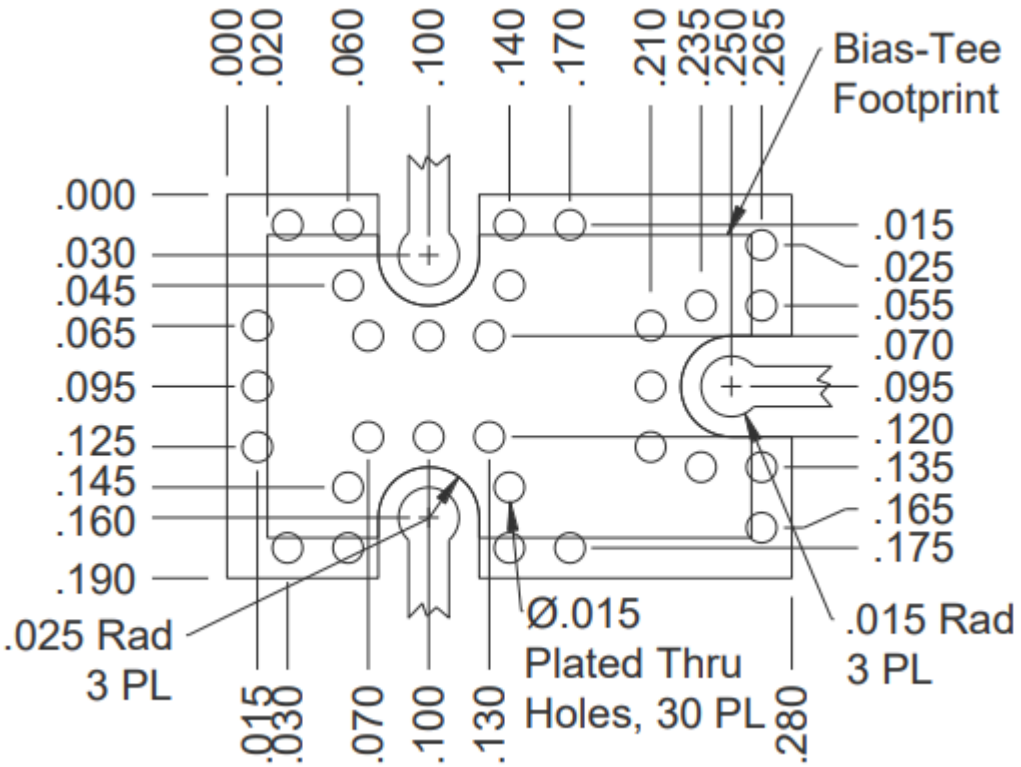
Outline Drawing

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



Footprint Image

Download : Footprint Drawing



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