

## WILKINSON POWER DIVIDER

**PD-0535SM**

### 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
- [Microwave Power Dividers & Couplers App Note](#)



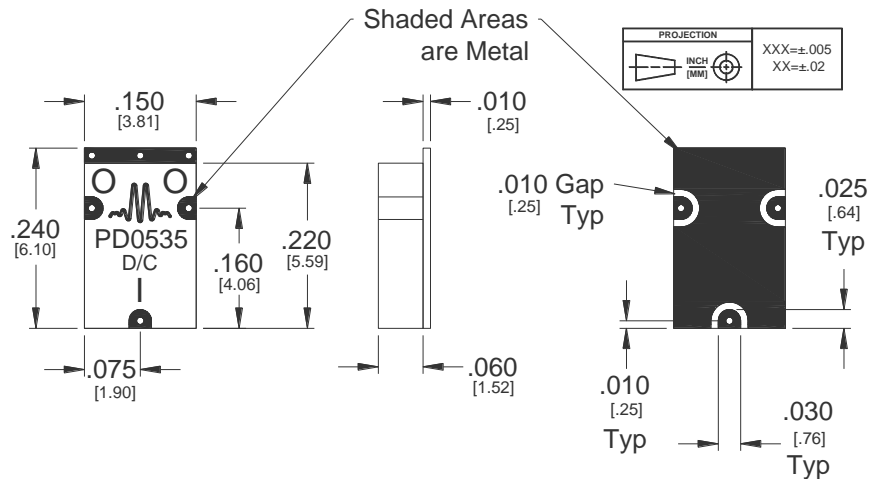
**Electrical Specifications** - Specifications guaranteed from -55 to +100°C, measured in a 50Ω system.

Parameter <sup>1</sup>	Frequency Range (GHz)	Min	Typ	Max	
Nominal Power Splitting (dB)	5 to 35		3		
Nominal Phase Shift (Degrees)			0		
Amplitude Balance (dB)			±0.25		
Phase Balance (Degrees)			±3		
Excess Insertion Loss (dB) <sup>2</sup>			1.5	3	
VSWR			1.5		
Isolation (dB)			18		
Power As Divider (W)					10
Power As Combiner (W)					1

<sup>1</sup>Specifications guaranteed when operated in a 50Ω system.

<sup>2</sup>Excess Insertion Loss = (Common Port to Output Port Insertion Loss) – 3 dB.

Model Number	Description
PD-0535SM	5 - 35 GHz Power Divider, Surface Mount



Substrate material is 5-mil thick Rogers 5880 or Taconic TLY-5, ½ Oz Electrodeposited Cu.

I/O Pads & Ground Plane Finish is 100-300 μ-inches 60/40 Pb/Sn Solder Plate, over Cu.

See <http://www.markimicrowave.com/menus/appnotes/an-bt-sm-pcb.pdf> for suggested PCB layout.

Drying bake required after aqueous wash.

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**Typical Performance**

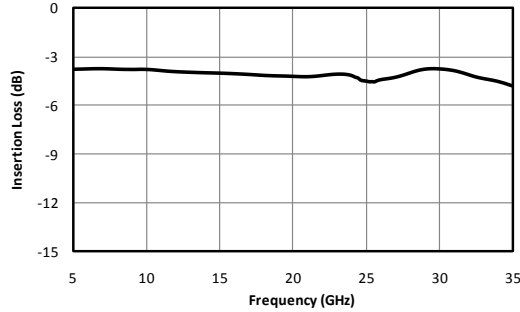


Fig. 1. Common port to output port insertion loss.

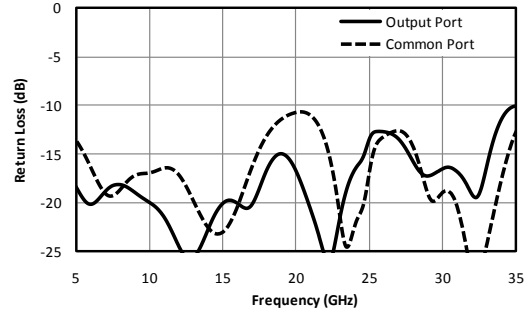


Fig. 2. Return loss for output and common ports.

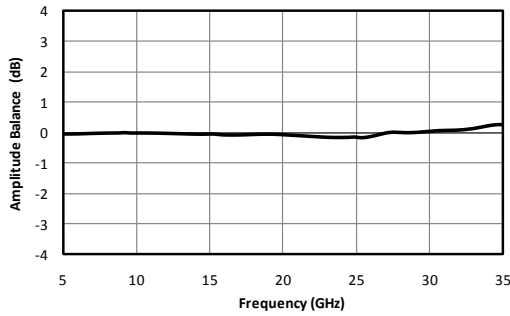


Fig. 3. Amplitude balance between output ports.

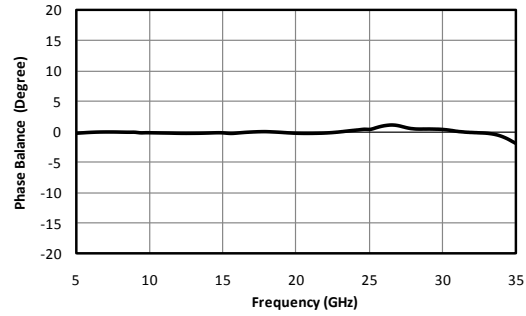


Fig. 4. Phase balance between output ports.

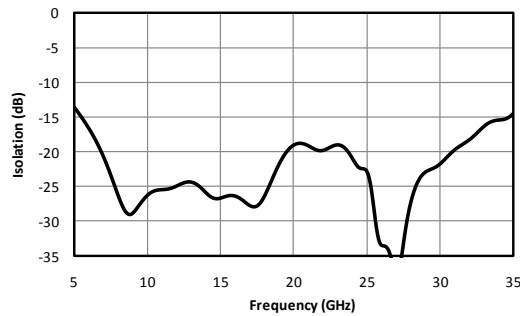


Fig. 5. Isolation between output ports.

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