



**LEAD-FREE / RoHS-COMPLIANT**  
**WILKINSON POWER DIVIDER**

**PD-0530SMG**

**Features**

- 5 to 30 GHz In Phase Power Splitting
- 1.5 dB Typical Insertion Loss
- 25 dB Typical Output to Output Isolation
- Surface Mount Package
- [Microwave Power Dividers & Couplers App Note](#)

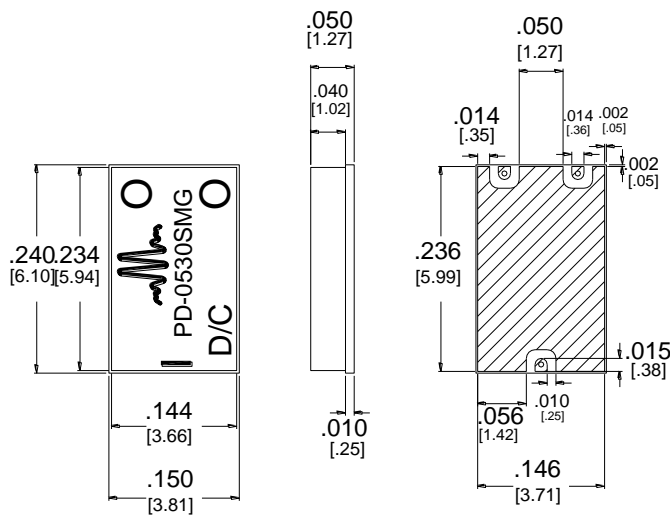
**Electrical Specifications** - Specifications guaranteed from -55 to +100°C, measured in a 50Ω system.

Parameter <sup>1</sup>	Frequency Range (GHz)	Min	Typ	Max	
Nominal Power Splitting (dB)	5 to 30		3		
Nominal Phase Shift (Degrees)			0		
Amplitude Balance (dB)				±0.1	
Phase Balance (Degrees)				±2	
Excess Insertion Loss (dB) <sup>2</sup>				1.5	3
VSWR				1.4	
Isolation (dB)				25	
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-0530SMG	5 - 30 GHz Power Divider, Surface Mount, <b>LEAD-FREE/RoHS COMPLIANT</b>



Substrate material is 10-mil thick Alumina, 5 μm Au.

I/O Pads & Ground Plane Finish is 20-40 μ-inches Au, over 1500Å Ni, over 500Å WTi.

See <http://www.markimicrowave.com/menus/appnotes/AN-PDSMCS-PCB.pdf> for suggested PCB layout.

**Typical Performance**

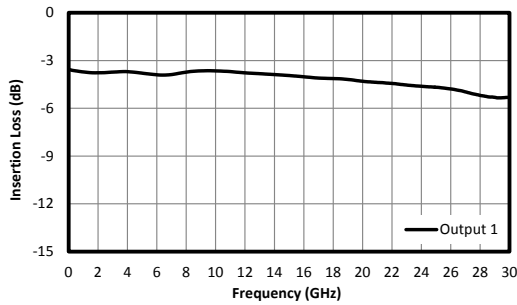


Fig. 1. Common port to output port insertion loss.

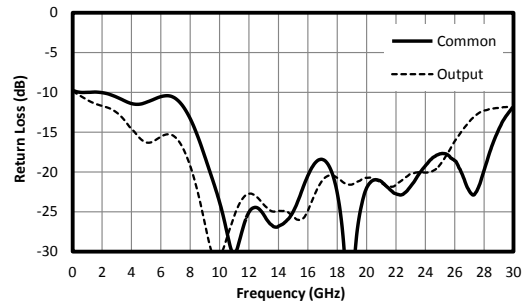


Fig. 2. Return loss for output and common ports.

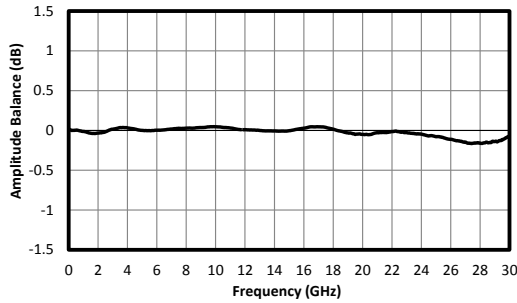


Fig. 3. Amplitude balance between output ports.

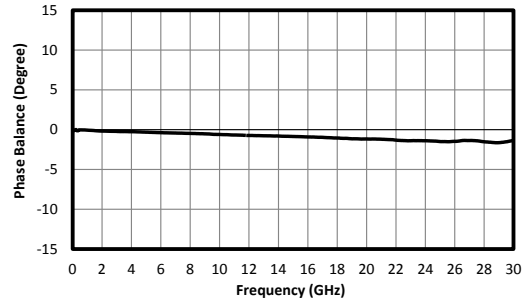


Fig. 4. Phase balance between output ports.

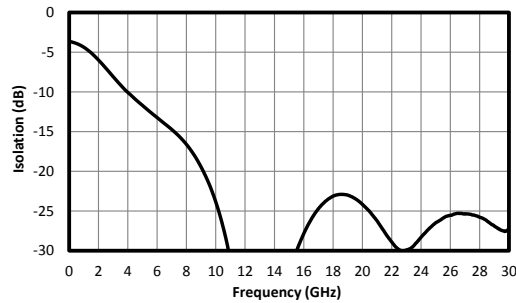


Fig. 5. Isolation between output ports.

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