

## RESISTIVE POWER DIVIDER

**PD-0030SM**

### Features

- DC to 30 GHz In-phase Power Splitting
- 1 dB Typical Insertion Loss
- Miniature Surface Mount Package
- [Reflow Solderable](#)
- [Microwave Power Dividers & Couplers App Note](#)



NOTE: [Please see this letter for LTB and recommended part information.](#)

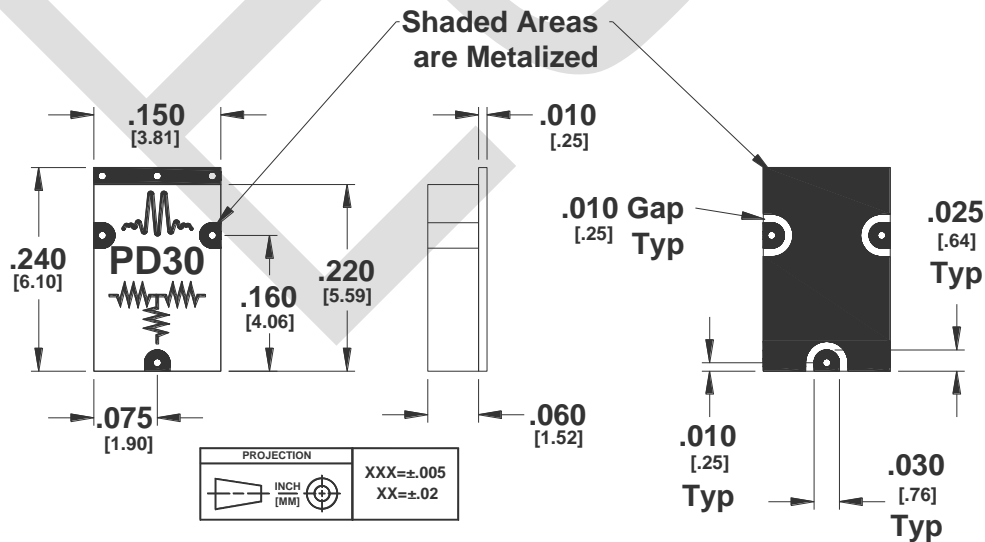
**Electrical Specifications** – Specifications guaranteed from -55 to +100°C, measured in a 50Ω system.

Parameter	Frequency Range	Min	Typ	Max	
Nominal Power Splitting (dB)	DC to 30 GHz		6		
Excess Insertion Loss (dB) <sup>1</sup>			1	3	
Nominal Phase Shift (Degrees)				0	
Amplitude Balance (dB)				±0.25	
Phase Balance (Degrees)				±3	
VSWR				1.6	
Input Power (Watt)					1

<sup>1</sup>Excess Insertion Loss = (Common Port to Output Port Insertion Loss) – 6 dB.

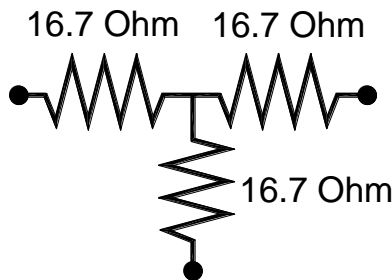
Model Number	Description
PD-0030SM ( <a href="#">EOL</a> )	DC to 30 GHz Power Divider, Surface Mount

Connectorized test fixtures available. Consult factory.



Substrate material is 10-mil thick Rogers 5880 or Taconic TLY-5, ½ Oz Electrodeposited Cu.  
Lead and 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.

**Circuit Schematic**



**Typical Performance**

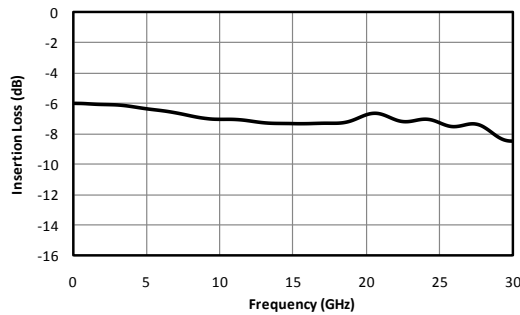


Fig. 1. Common port to output port insertion loss.

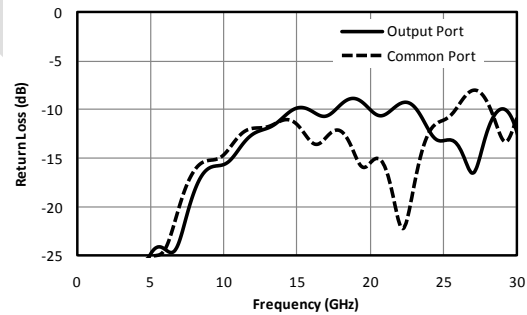


Fig. 2. Return loss for output and common ports.

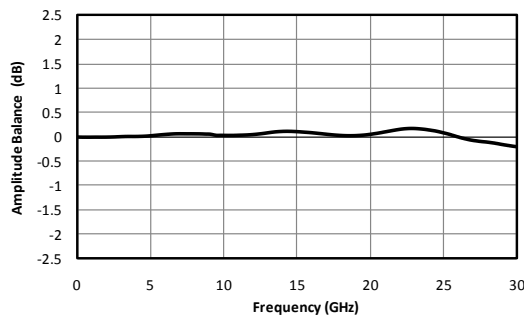


Fig. 3. Amplitude balance between output ports.

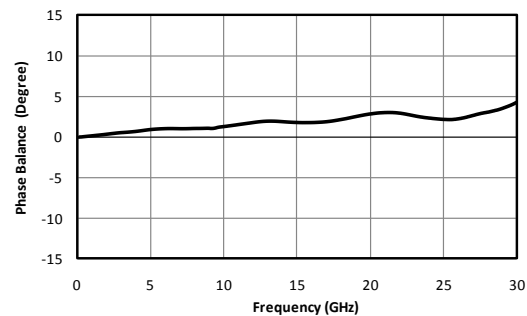


Fig. 4. Phase balance between output ports.

**NOTE:**

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