

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](#)



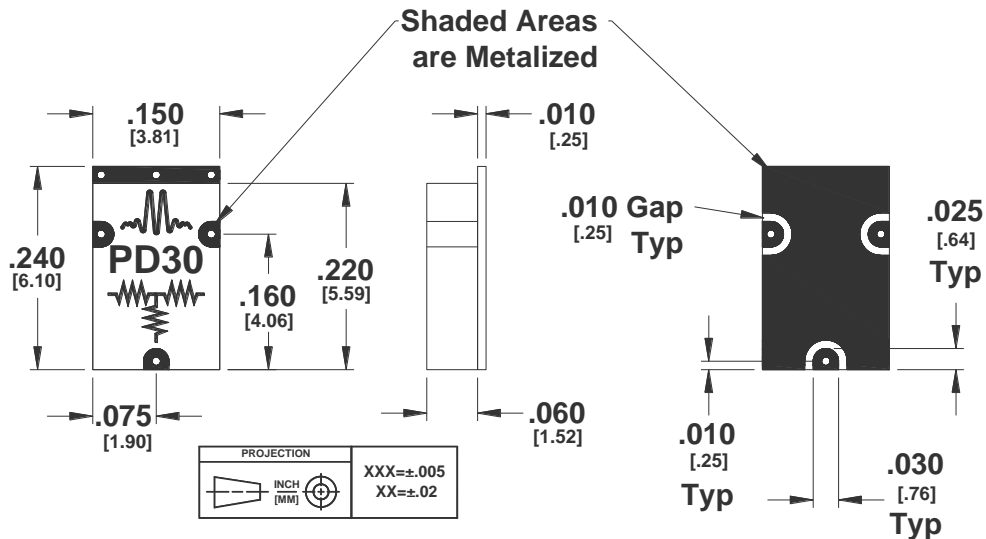
Electrical Specifications – Specifications guaranteed from -55 to +100°C, measured in a 50Ω system.

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

¹Excess Insertion Loss = (Common Port to Output Port Insertion Loss) – 6 dB.

Model Number	Description
PD-0030SM	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.

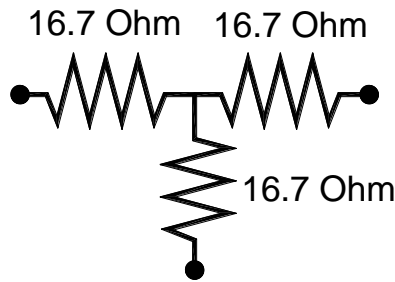
See <http://www.markimicrowave.com/menus/appnotes/an-bt-sm-pcb.pdf> for suggested PCB layout.

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Circuit Schematic



Typical Performance

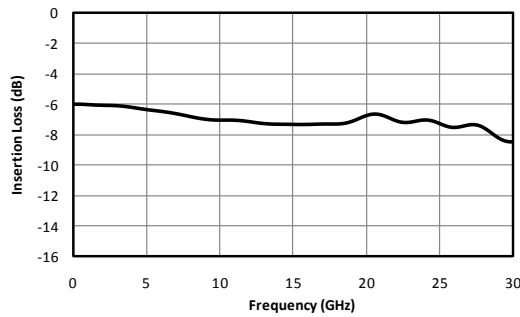


Fig. 1. Common port to output port insertion loss.

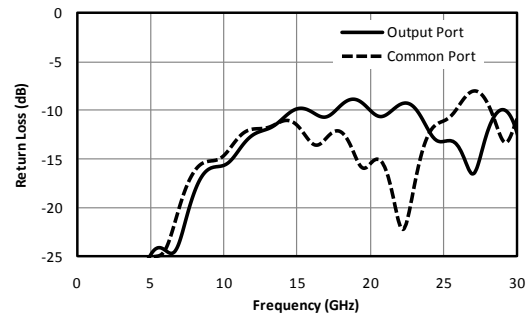


Fig. 2. Return loss for output and common ports.

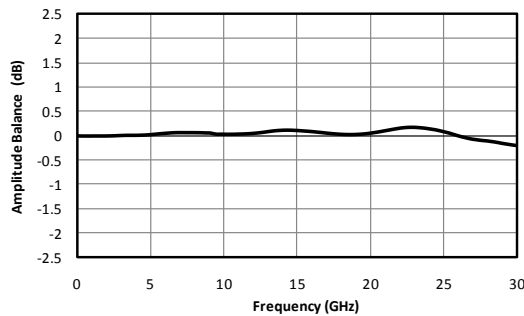


Fig. 3. Amplitude balance between output ports.

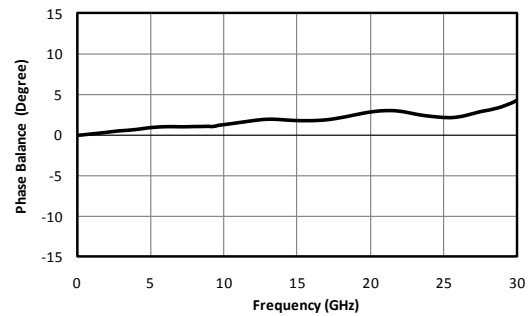


Fig. 4. Phase balance between output ports.

NOTE:

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