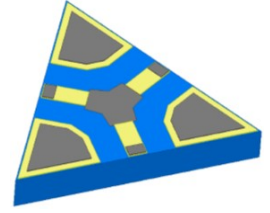


# DC-40.0GHz Flip Chip Resistive Divider

**PDR05848**



## DESCRIPTION

A flip chip resistive divider ideal for applications where small size and broad band performance are critical for success. This component is ideal for test measurement and optical applications. The divider is provided with all pads bumped with gold-tin solder for easy integration into hybrid assemblies.

## FEATURES

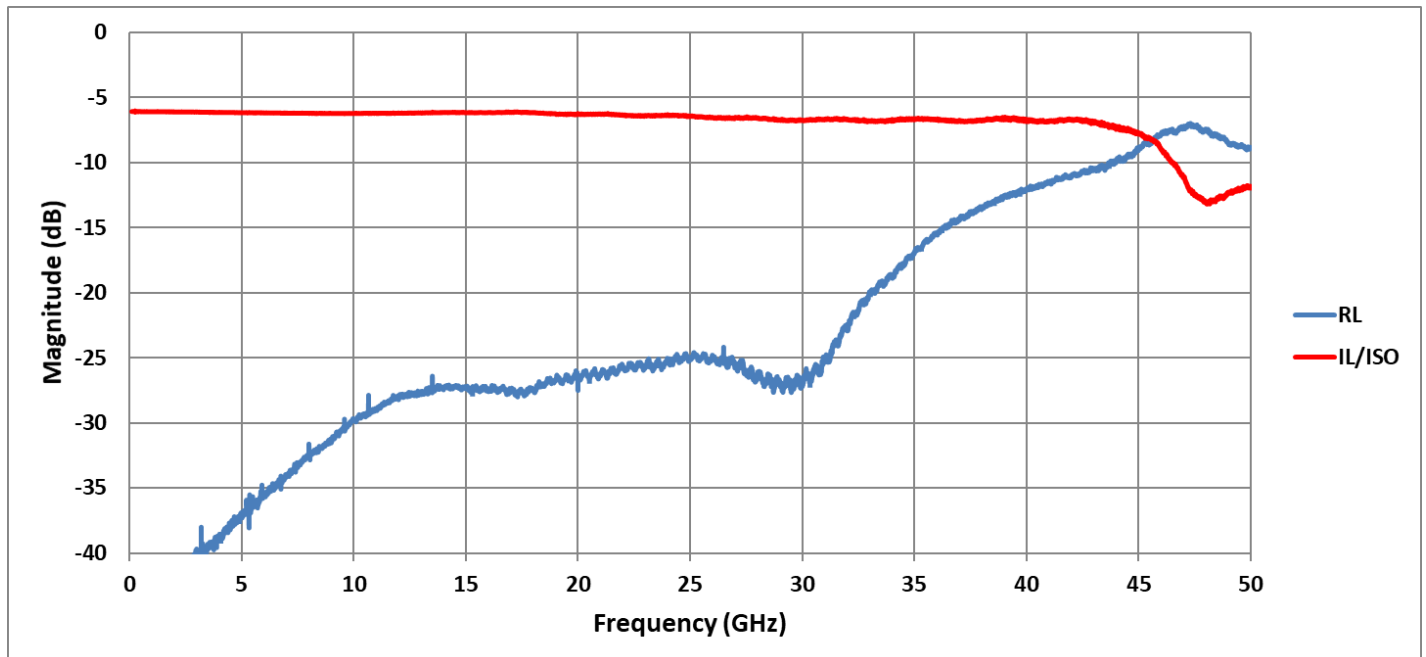
- Small Size
- Frequency Stable over Temperature
- Flip Chip Solder Surface Mountable
- AuSn Bumped I/O Pads for Hybrid Assembly
- Moisture Sensitivity Level: MSL1
- Operating & Storage Temp: -55°C to +125°C
- Characteristic Impedance: 50Ω

## SPECIFICATIONS\*

Parameter	Frequency	Min	Typ	Max
Excess Insertion Loss (dB)	DC - 40GHz		0.5dB	1dB
Return Loss (dB)	DC - 30GHz	20dB	25dB	
	30-40GHz	10dB	15dB	
Size (LxWxH)		0.075 x 0.065 x 0.010 in 1.905 x 1.651 x 0.254 mm		

\*Electrical specifications based on typical probed performance at room temperature. Insertion loss shall vary ±0.5dB over temperature.

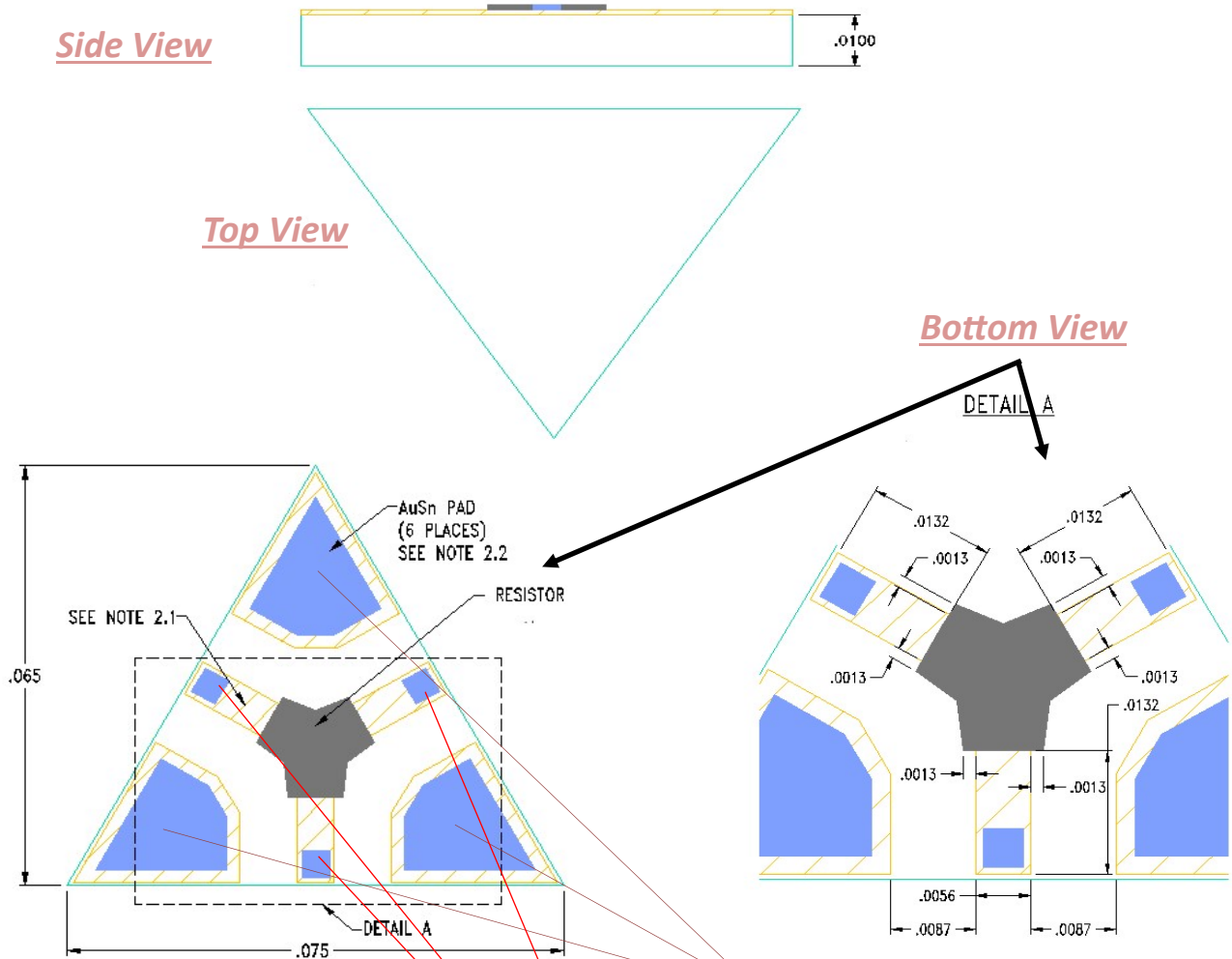
## Typical Measured Performance



# DC-40.0GHz Flip Chip Resistive Divider

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## Physical Dimensions (Unit = inches)



### 2. METALLIZATION:

2.1

200 μINCHES MIN. Au OVER

2.2

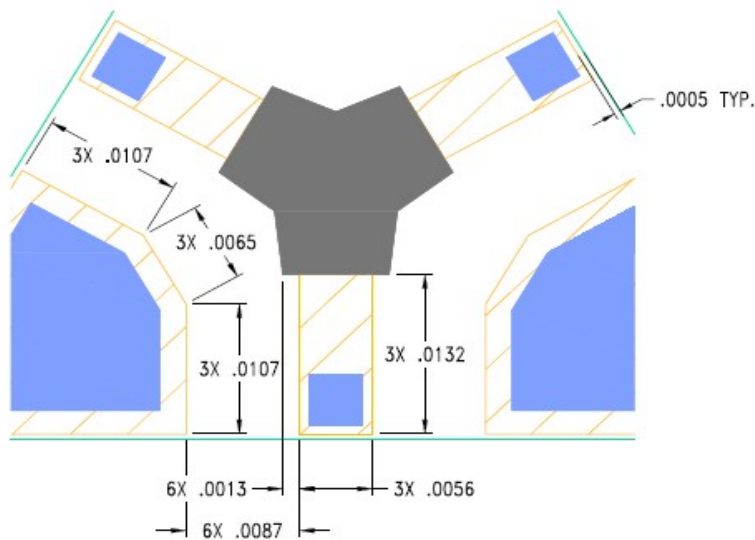
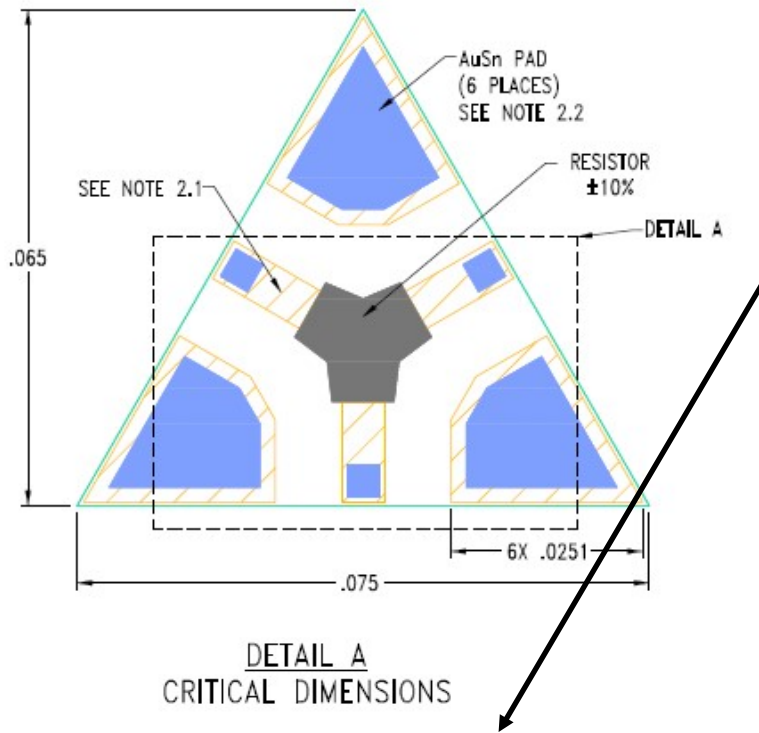
200-220 μINCHES AuSn OVER  
6-8 μINCHES Pt OVER  
200 μINCHES MIN. Au OVER

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## Physical Dimensions (Unit = inches)

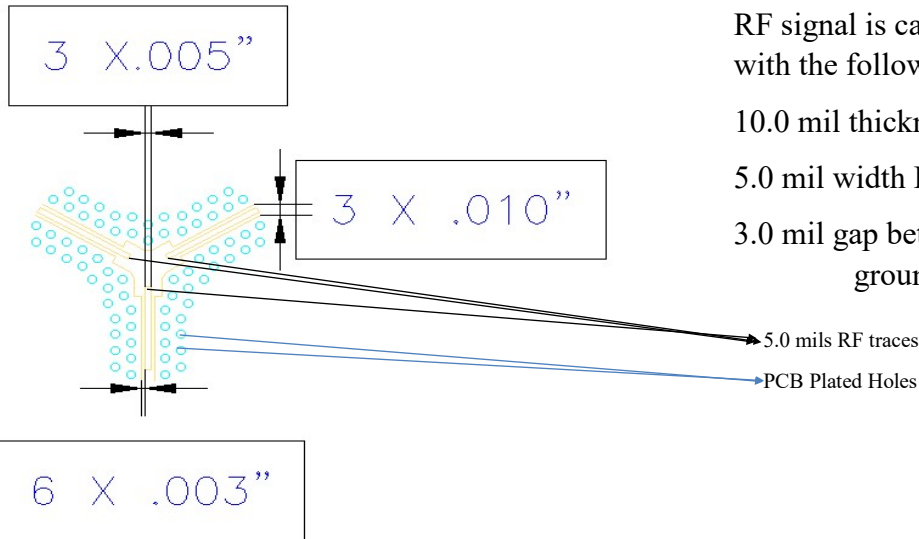
3X RF & 3X ground pad dimensions



# DC-40.0GHz Flip Chip Resistive Divider

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## Recommended PCB Layout (Unit = inches)



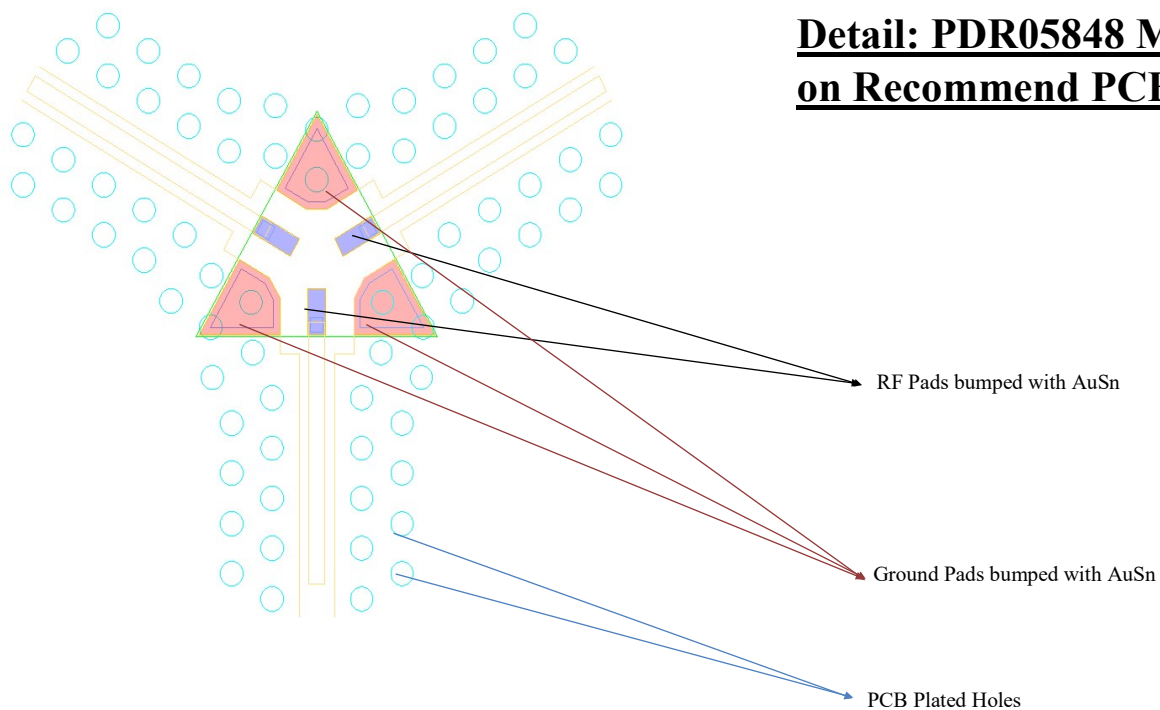
### Recommend PCB board :

RF signal is carried on  $50.0\Omega$  GCPW trace with the following dimensions :

10.0 mil thickness Alumina (AL) board

5.0 mil width RF trace (copper)

3.0 mil gap between the RF trace and PCB ground.



### Detail: PDR05848 Mounted on Recommend PCB

