

## 4 to 8GHz 10dB Directional Coupler

**FPC06149**

### DESCRIPTION

DLI introduces its new high frequency surface mountable catalog direction couplers. These couplers incorporate DLI's high dielectric ceramic materials which provide small size and minimal performance variation over temperature. The components are well matched for monitoring incident and reflected power.

### FEATURES

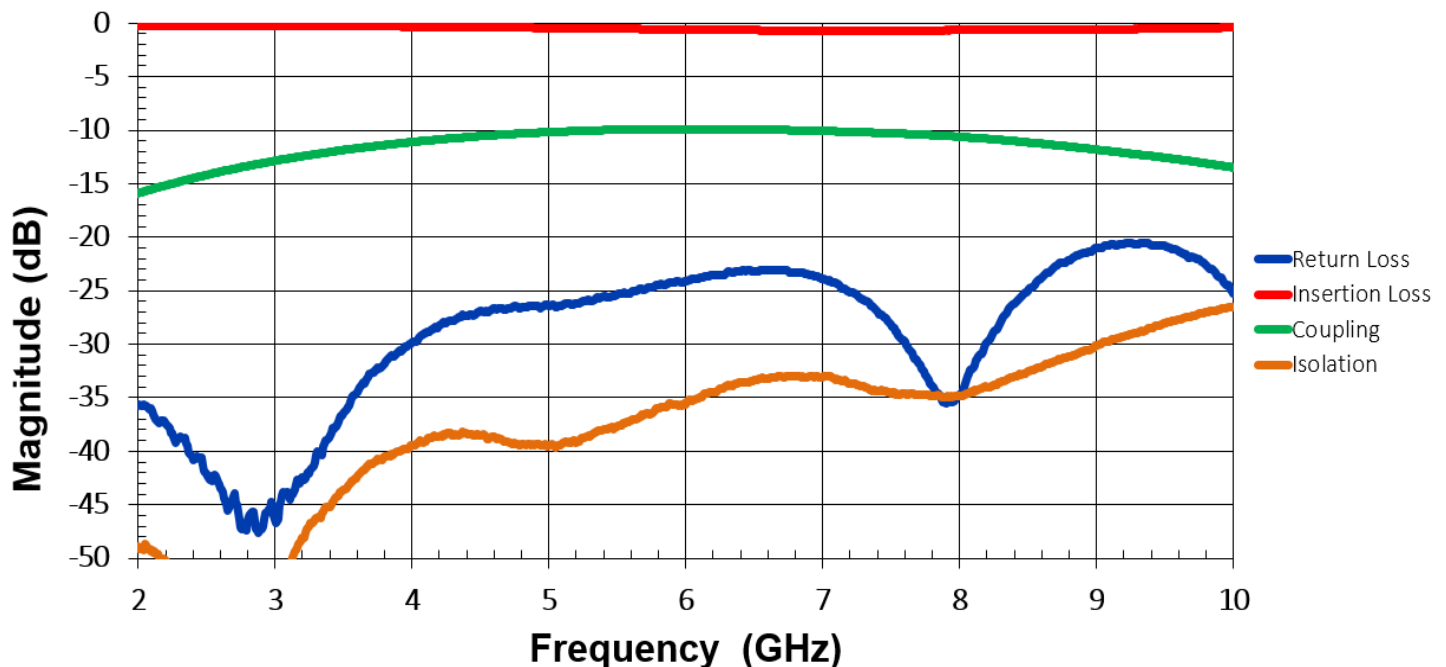
- Small Size
- Shielded Component
- Wirebond
- Moisture Sensitivity Level: MSL1
- Frequency Stable over Temperature
- Operating & Storage Temp: -55°C to +125°C
- Characteristic Impedance: 50Ω

### SPECIFICATIONS\*

Parameter	Frequency (GHz)	Min	Max
Passband Insertion Loss* (dB)	4 - 8		0.3
Passband Return Loss (dB)		18	
Coupling (dB)		10	11.5
Directivity (dB)		20	
Input Power			TBD
Size (LxWxH)	0.180 x .080 x .015 in 4.572 x 2.032 x .381mm		

\*Electrical specifications based on typical mounted performance at room temperature. Insertion loss shall vary  $\pm 0.5$ dB over temperature.

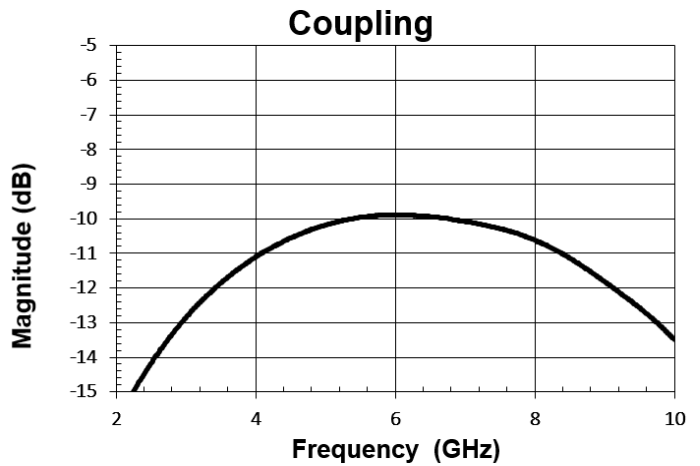
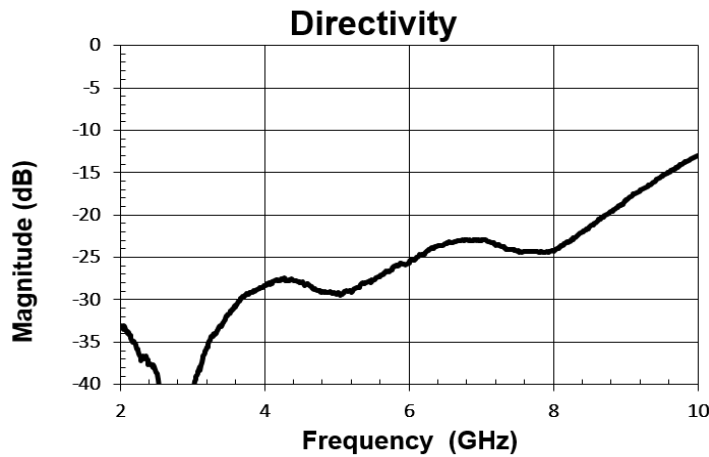
### Typical Measured Performance



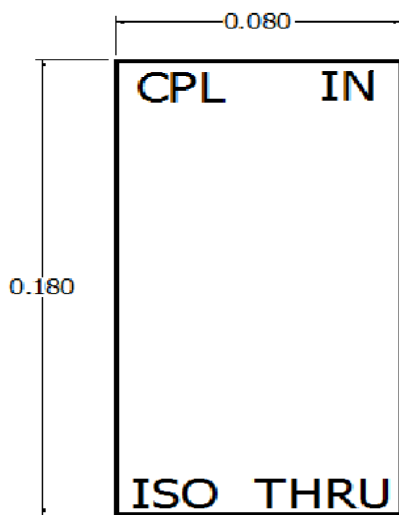
\*Typical measured performance mounted on RO4350B test board at 25°C.

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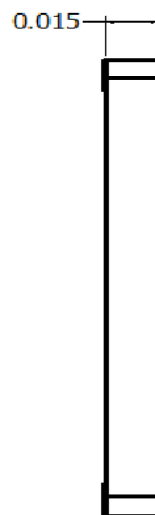
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**Physical Dimensions**

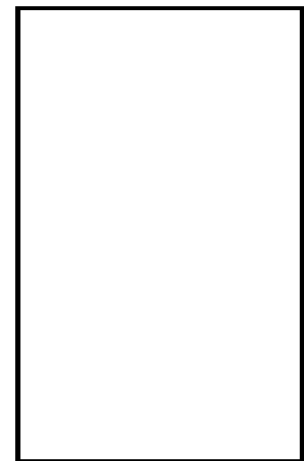


Top



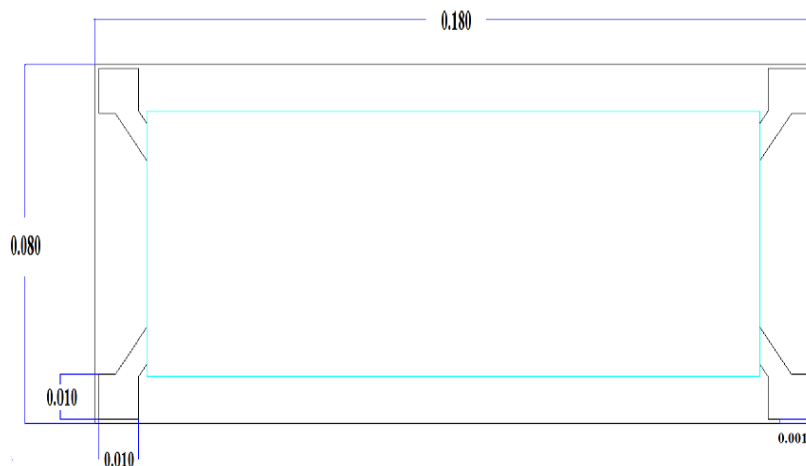
Side

Units = Inches



Bottom

**Recommended PCB Layout**



- 50Ω trace dimensions are application specific.
- Ensure adequate grounding beneath the part.
- Trace feed locations can be horizontal, vertical or angled.

