

20 to 40GHz 20dB

Directional Coupler with Built-In Termination

FPC08035

DESCRIPTION

DLI introduces a wide band surface mountable catalog coupler with a 50Ohm built-in-terminated port. This coupler is built on DLI's high dielectric ceramic which provides a small footprint and minimal performance variation over temperature.

FEATURES

- Small Size
- Built-In Termination
- Solder Surface Mount Package
- Moisture Sensitivity Level: MSL1
- Frequency Stable over Temperature
- Operating & Storage Temp: -55°C to +125°C
- Characteristic Impedance: 50Ω

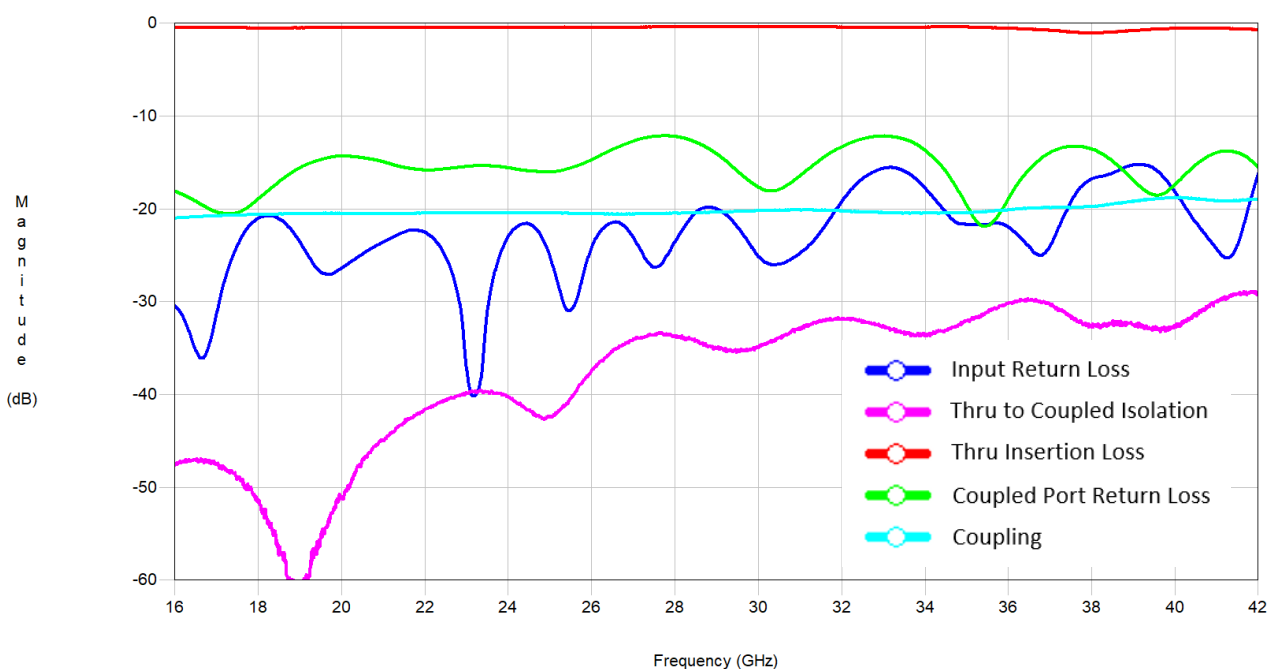
SPECIFICATIONS

Parameter	Frequency (GHz)	Min	Max
Passband Insertion Loss* (dB) (Excessive IL)	20-40		0.5
Passband Return Loss (dB)		10	
Coupling (dB)		18.5	21.5
Directivity (dB)		10	
Input Power (W)			TBD
Size (LxWxH)	0.065 x 0.050x .010 in 1.651 x 1.27 x 0.254 mm		

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

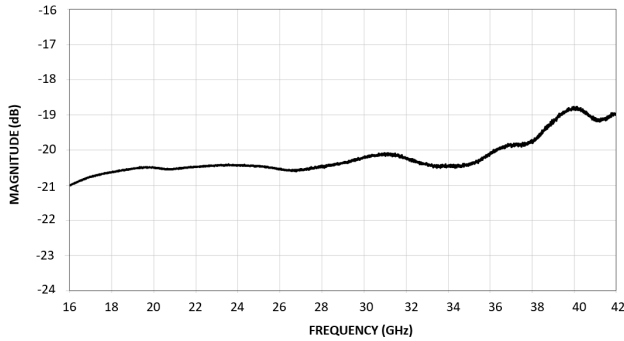
Typical Measured Performance

*Typical performance mounted on 10.0 mils | RO4350B test board at 25°C.

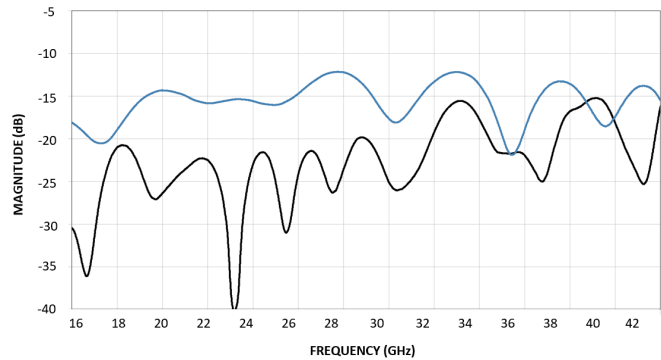


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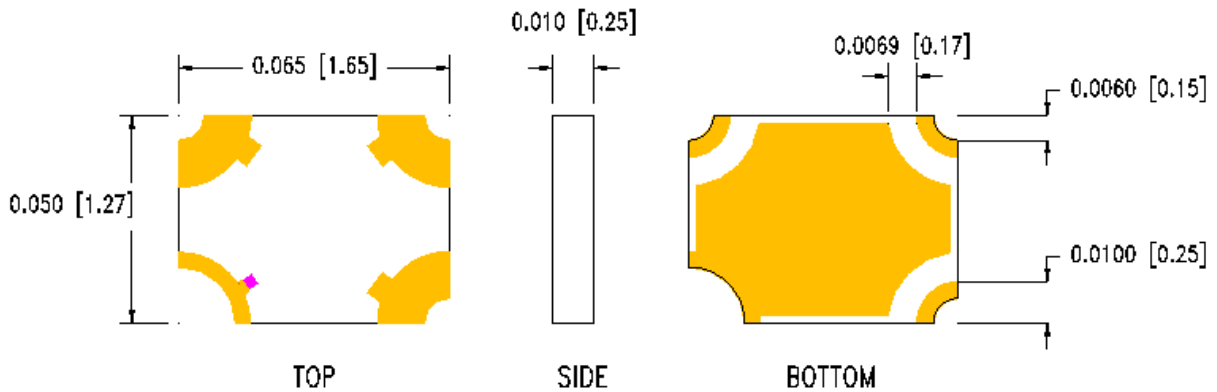
Coupling



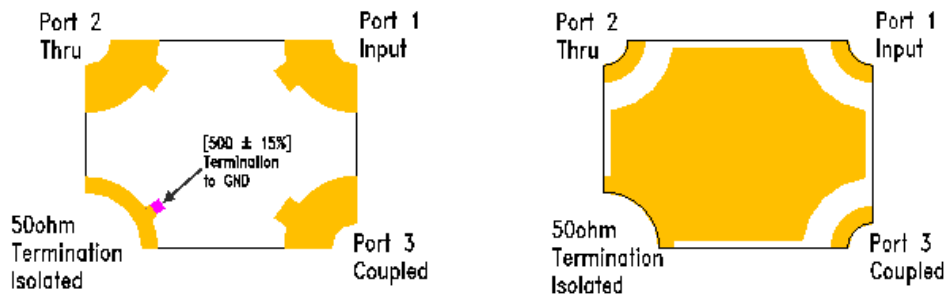
Return Loss



Physical Dimensions
unit = in [mm]



PORT CONFIGURATION



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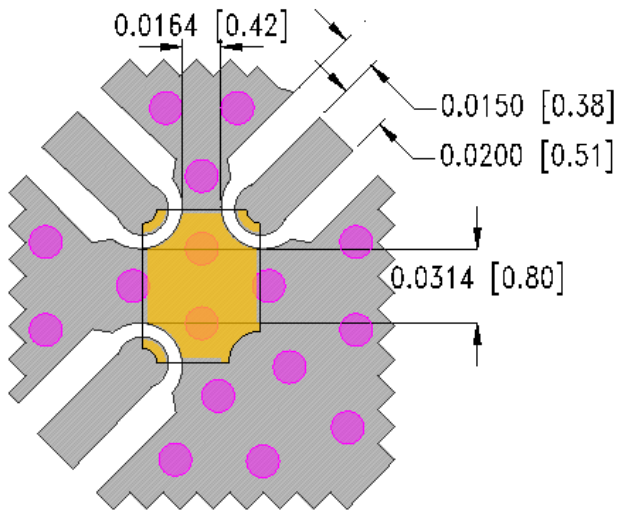
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Recommended PWB Layout

unit = in [mm]

- 50Ω trace dimensions are application specific
- Ensure adequate grounding beneath the part



-  Ground Via
-  Coupler Bottom Metallization
-  PWB Top Metallization

