

# **DIRECTIONAL COUPLER**

C13-0140

The C13-0140 is a broadband 1-40 GHz, 13 dB directional coupler. The multisection tri-plate stripline design exhibits excellent coupling flatness and VSWR at all ports. Custom designs are also available, contact the factory for details.



#### **Features**

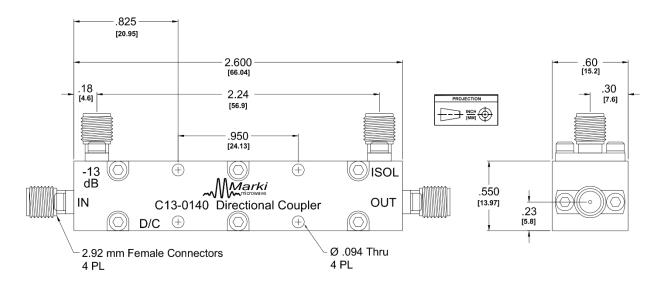
- Broadband Performance
- Excellent Coupling Flatness
- High Directivity
- Low VSWR
- Microwave Power Dividers & Couplers App Note

### **Electrical Specifications**

Parameter <sup>1</sup>	Frequency Range (GHz)	Min	Тур	Max
Mean Coupling (dB)			13	
Amplitude Flatness (dB) <sup>2</sup>	1-40		±1	±2.2
Direct Line Insertion Loss (dB)				2.2
VSWR	1-20		1.2	1.45
	20-40		1.45	
Directivity (dB)	1-20	13	16	
	20-40	9	13	
Weight (g)			45	

 $<sup>^{1}</sup>$ Specifications guaranteed when operated in a 50 $\Omega$  system.

<sup>&</sup>lt;sup>2</sup>Deviation from average coupling.



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### **Typical Performance**

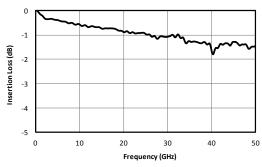


Fig. 1. Direct line insertion loss.

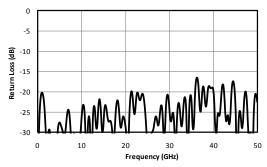


Fig. 2. Typical port return loss.

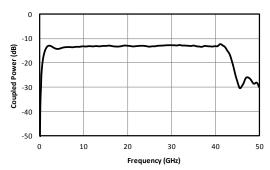


Fig. 3. Coupled port power.

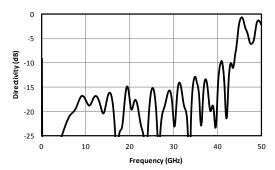


Fig. 4. Typical directivity.

Model Number	Description	
C13-0140	1-40 GHz 13 dB Directional Coupler with 2.92 mm connectors	

<sup>&</sup>lt;sup>1</sup>Default is 2.92 mm female connectors. Consult factory for other connector options.

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