

LEAD-FREE / RoHS-COMPLIANT

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](#)

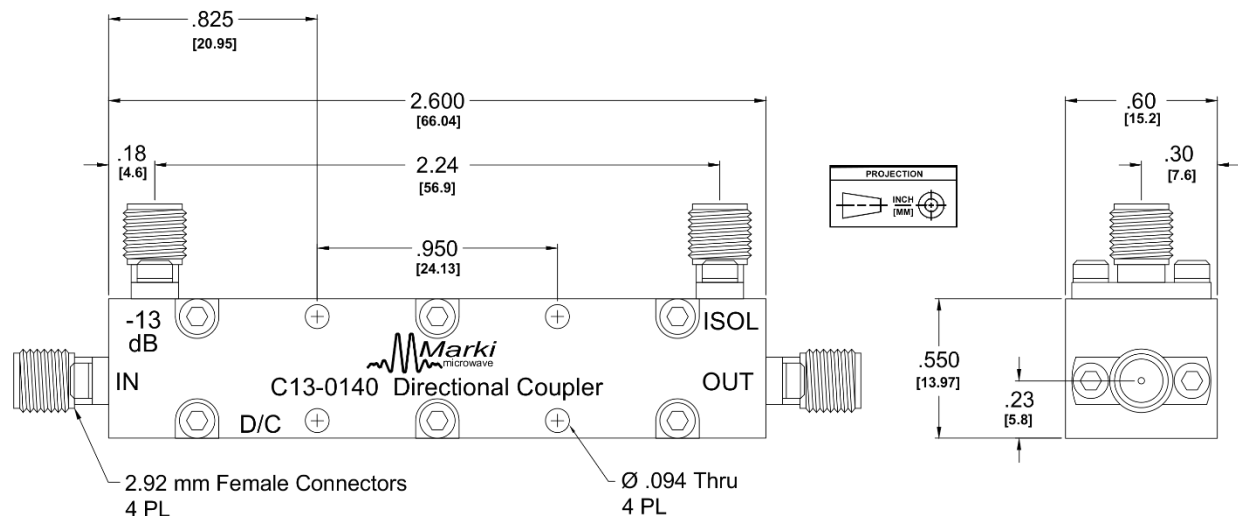


Electrical Specifications

Parameter ¹	Frequency Range (GHz)	Min	Typ	Max
Mean Coupling (dB)	1-40		13	
Amplitude Flatness (dB) ²			±1	±2.2
Direct Line Insertion Loss (dB)	DC-40			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	

¹Specifications guaranteed when operated in a 50Ω system.

²Deviation from average coupling.



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Typical Performance

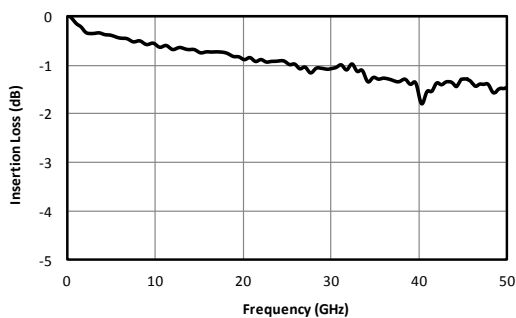


Fig. 1. Direct line insertion loss.

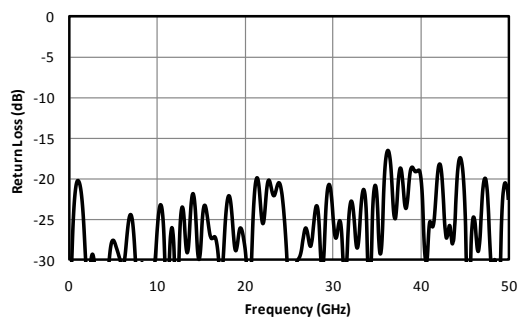


Fig. 2. Typical port return loss.

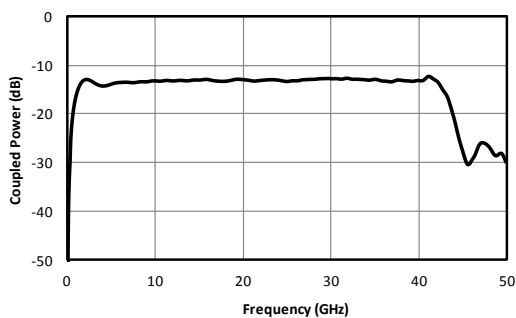


Fig. 3. Coupled port power.

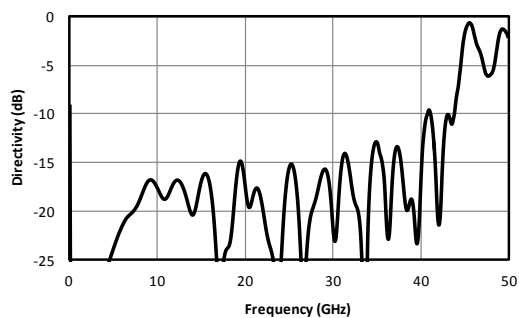


Fig. 4. Typical directivity.

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Model Number	Description
C13-0140	1-40 GHz 13 dB Directional Coupler with 2.92 mm connectors ¹ , LEAD-FREE/ROHS COMPLIANT

¹Default is 2.92 mm female connectors. Consult factory for other connector options.

Revision History

Revision code	Revision Date	Comment
I	4/2020	Updated Direct Line IL specs

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