

LEAD-FREE / RoHS-COMPLIANT

DIRECTIONAL COUPLER

C10-0450

The C10-0450 is a broadband 4-50 GHz, 10 dB directional coupler. The multisection tri-plate stripline design exhibits excellent coupling flatness and VSWR to 50 GHz. 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](#)

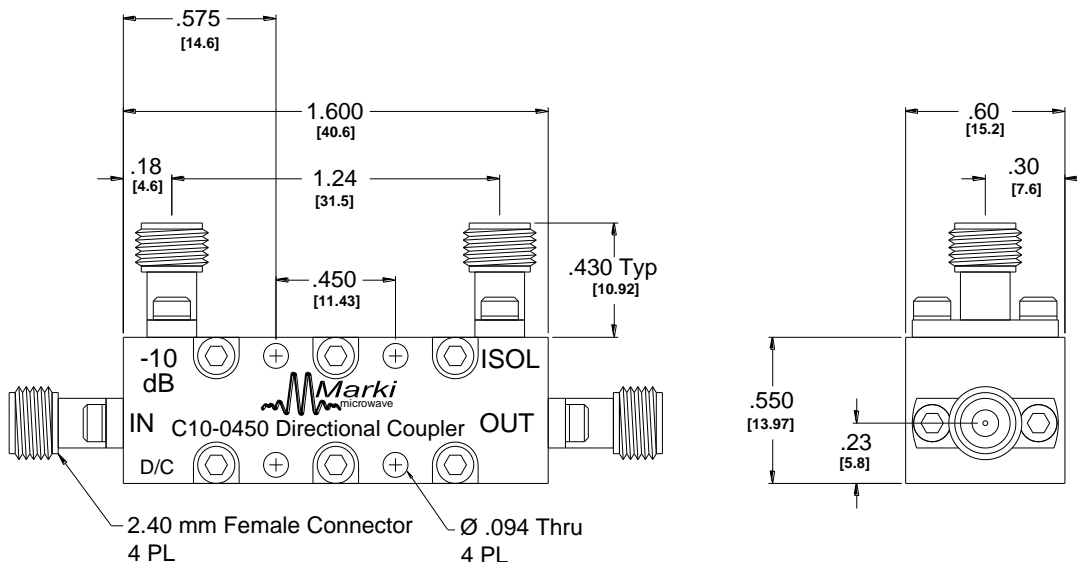


Electrical Specifications

Parameter ¹	Frequency Range (GHz)	Min	Typ	Max
Mean Coupling (dB)	4-50		10	
Amplitude Flatness (dB) ²			±0.5	±1.5
Direct Line Insertion Loss (dB)	DC-50			2.5
VSWR	4-40		1.35	1.55
	40-50		1.55	
Directivity (dB)	4-50	9	15	
Weight (g)			35	

¹Specifications guaranteed when operated in a 50Ω system.

²Deviation from average coupling.



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Typical Performance

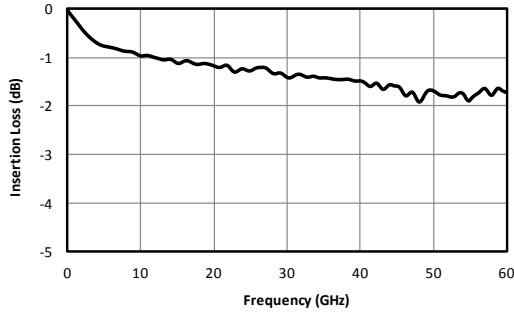


Fig. 1. Direct line insertion loss.

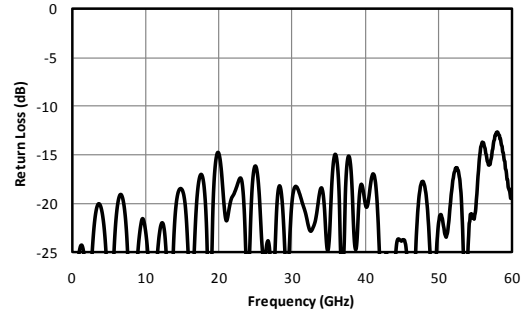


Fig. 2. Typical port return loss.

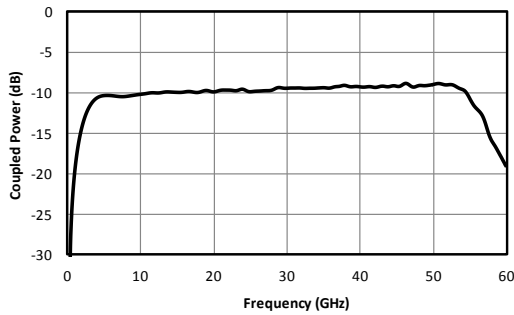


Fig. 3. Coupled port power.

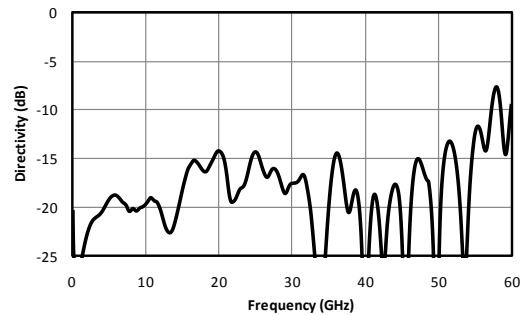


Fig. 4. Typical directivity.



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Model Number	Description
C10-0450	4-50 GHz 10 dB Directional Coupler with 2.40 mm connectors ¹ , LEAD-FREE/ROHS COMPLIANT

¹Default is 2.4 mm female connectors. Consult factory for other connector options.

Revision History

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

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