



LEAD-FREE / RoHS-COMPLIANT

DUAL DIRECTIONAL COUPLER

CD10-0114

The CD10-0114 is a broadband, high directivity 0.8-14.7 GHz, 10 dB dual directional coupler. The multisection tri-plate stripline design exhibits excellent coupling flatness and VSWR at all ports. Applications include reflectometry (return loss) measurements, level monitoring, etc. Custom designs are also available, contact the factory for details.

Features

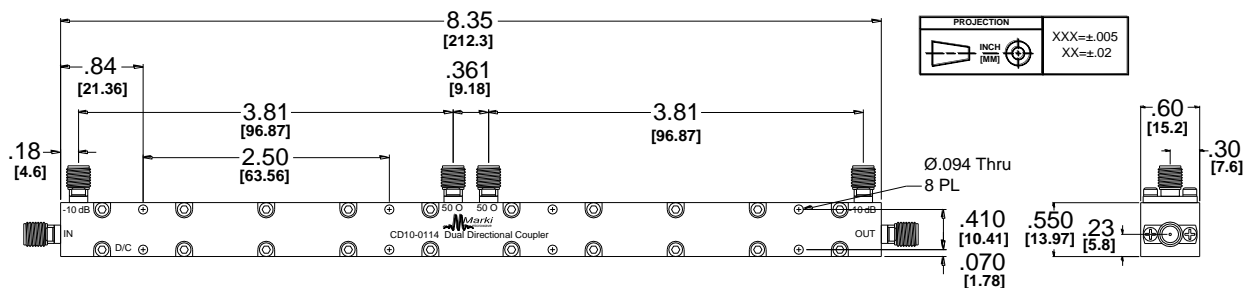
- Dual Directional
- Excellent Coupling Flatness
- High Directivity
- Low VSWR
- [Microwave Power Dividers & Couplers App Note](#)

Electrical Specifications

Parameter ¹	Frequency Range (GHz)	Min	Typ	Max
Mean Coupling (dB)	0.8-14.7		10	
Amplitude Flatness (dB) ²			±0.6	±1.75
Direct Line Insertion Loss (dB)	DC-14.7			3
VSWR	0.8-14.7		1.17	1.34
Directivity (dB)	0.8-12	20	23	
	12-14.7	15	18	
Weight (g)			132	

¹Specifications guaranteed when operated in a 50Ω system.

²Deviation from average coupling.



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Typical Performance

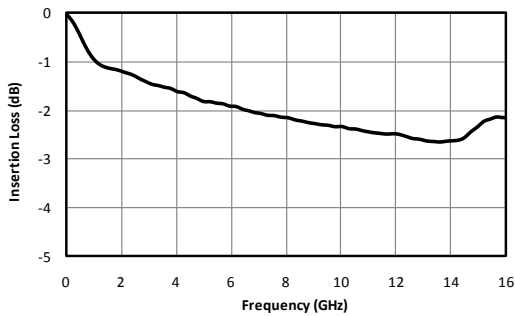


Fig. 1. Direct line insertion loss.

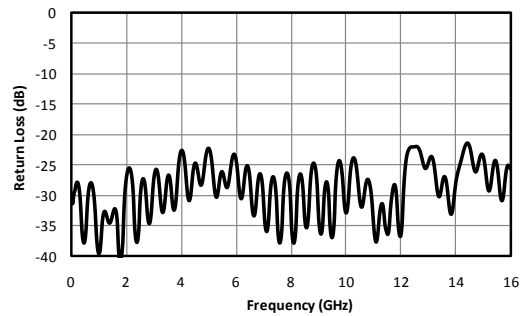


Fig. 2. Typical port return loss.

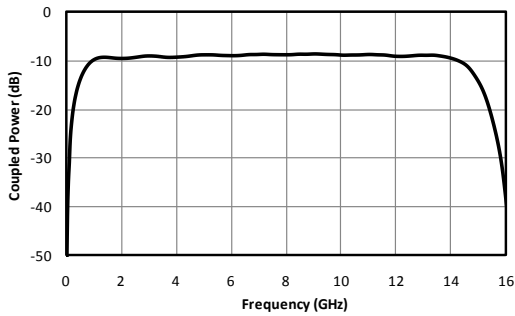


Fig. 3. Coupled port power.

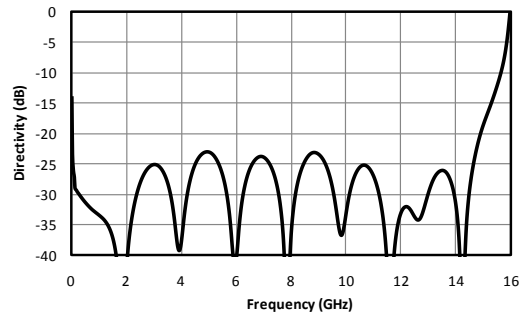


Fig. 4. Typical directivity.



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Model Number	Description
CD10-0114	0.8-14.7 GHz High Directivity, 10 dB Dual Directional Coupler with SMA connectors ¹ , LEAD-FREE/RoHS COMPLIANT

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

Revision History

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

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