

## **DIRECTIONAL COUPLER**

C13-0150

The C13-0150 is an ultra broadband 1-50 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**

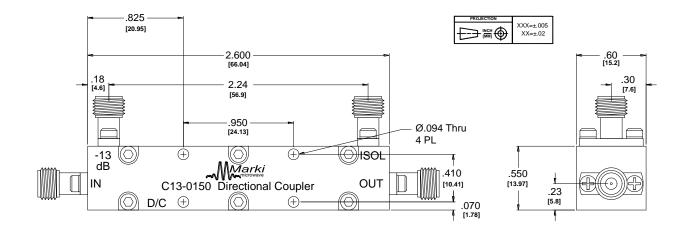
- Ultra Broadband Performance
- Excellent Coupling Flatness
- High Directivity
- Low VSWR
- Microwave Power Dividers & Couplers App Note

## **Electrical Specifications**

Parameter <sup>1</sup>	Frequency Range (GHz)	Min	Тур	Max
Mean Coupling (dB)	1-50		13	
Amplitude Flatness (dB) <sup>2</sup>	1-50		±0.75	±1.75
Direct Line Insertion Loss (dB)	1-50			2.2
VSWR	1-20		1.25	1.4
	20-50			1.65
Directivity (dB)	1-30	13	16	
	30-50	9	12	
Weight (g)			45	

Specifications guaranteed when operated in a  $50\Omega$  system.

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





# **DIRECTIONAL COUPLER**

C13-0150

Page 2

## **Typical Performance**

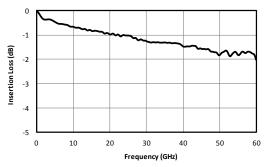


Fig. 1. Direct line insertion loss.

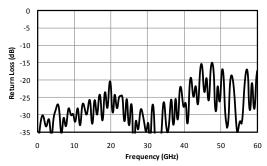


Fig. 2. Typical port return loss.

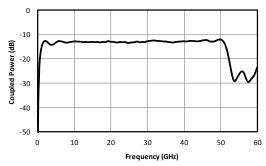


Fig. 3. Coupled port power.

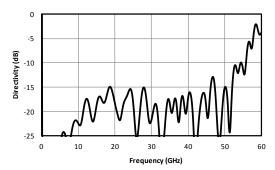


Fig. 4. Typical directivity.

Model Number	Description	
C13-0150	1-50 GHz 13 dB Directional Coupler with 2.4 mm connectors	

<sup>1</sup>Default is 2.4 mm female connectors. Consult factory for other connector options.

Marki Microwave reserves the right to make changes to the product(s) or information contained herein without notice. Marki Microwave makes no warranty, representation or guarantee regarding the suitability of its products for any particular purpose, nor does Marki Microwave assume any liability whatsoever arising out of the use of or application of any product.



