

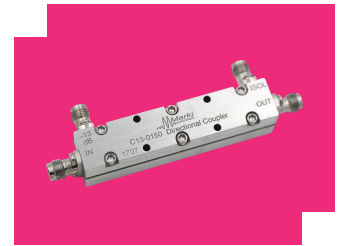
C13-0150

DIRECTIONAL COUPLER

DEVICE OVERVIEW

General Description

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.



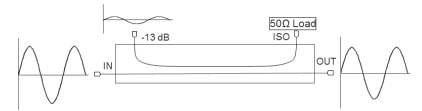
Features

- Ultra Broadband Performance
- Excellent Coupling Flatness
- High Directivity
- Low VSWR

Applications

N/A

Functional Block Diagram



Part Ordering Options

Part Number	Description	Connectors	Green Status	Product Lifecycle	Export Classification
C13-0150	DIRECTIONAL COUPLER	<u>Standard</u>	REACH RoHS	Released	EAR99

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Revision History

Revision Code	Revision Date	Comment
B	2020-04-01	Updated Direct Line IL specs

Specifications

Absolute Maximum Ratings

Parameter	Maximum Rating	Unit
RF Power Handling	15	W
Minimum Operating Temperature	-55	°C
Maximum Operating Temperature	100	°C
Minimum Storage Temperature	-65	°C
Maximum Storage Temperature	125	°C

Package Information

Parameter	Details	Rating
Weight	-	45g
Dimensions	-	66.04 × 13.97 mm

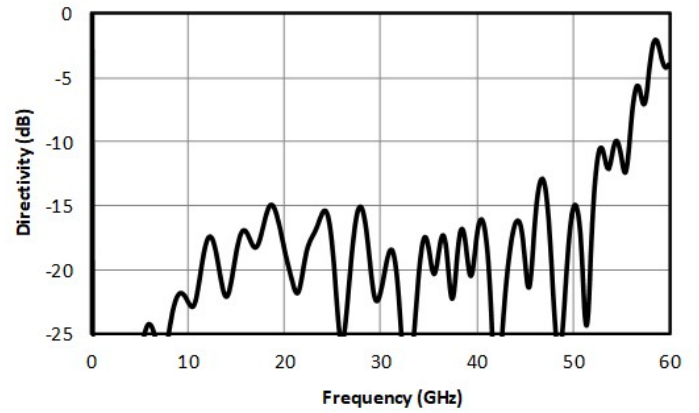
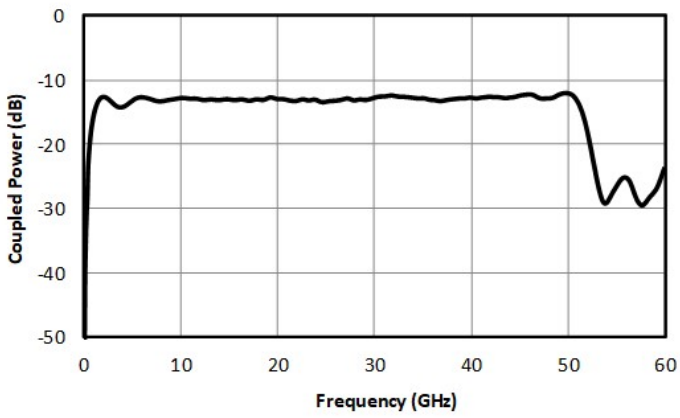
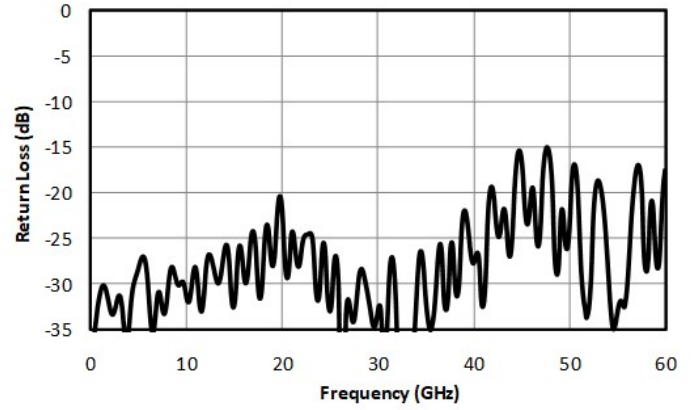
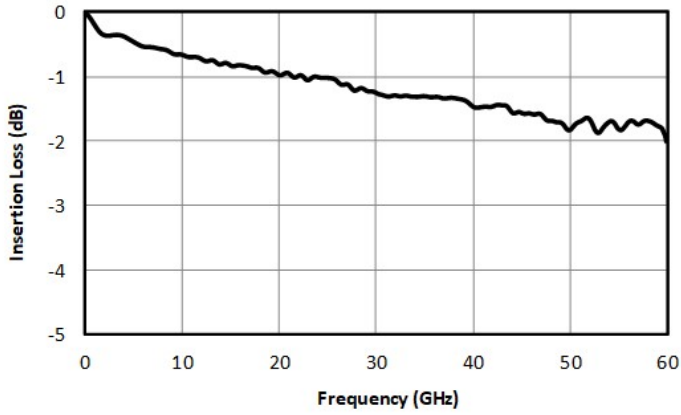
Electrical Specifications

The electrical specifications apply at TA=+25°C in a 50Ω system

Parameter	Test Conditions	Minimum Frequency (GHz)	Maximum Frequency (GHz)	Min	Typ	Max	Unit
Amplitude Flatness ¹	-	1	50	-	0.75	1.75	dB
Directivity	-	30	50	9	12	-	dB
Directivity	-	1	30	13	16	-	dB
Direct Line Insertion Loss	DC-50	-	-	-	-	2.2	dB
Mean Coupling	-	1	50	-	13	-	dB
VSWR	-	20	50	-	-	1.65	
VSWR	-	1	20	-	1.25	1.4	

^[1] Deviation from average coupling.

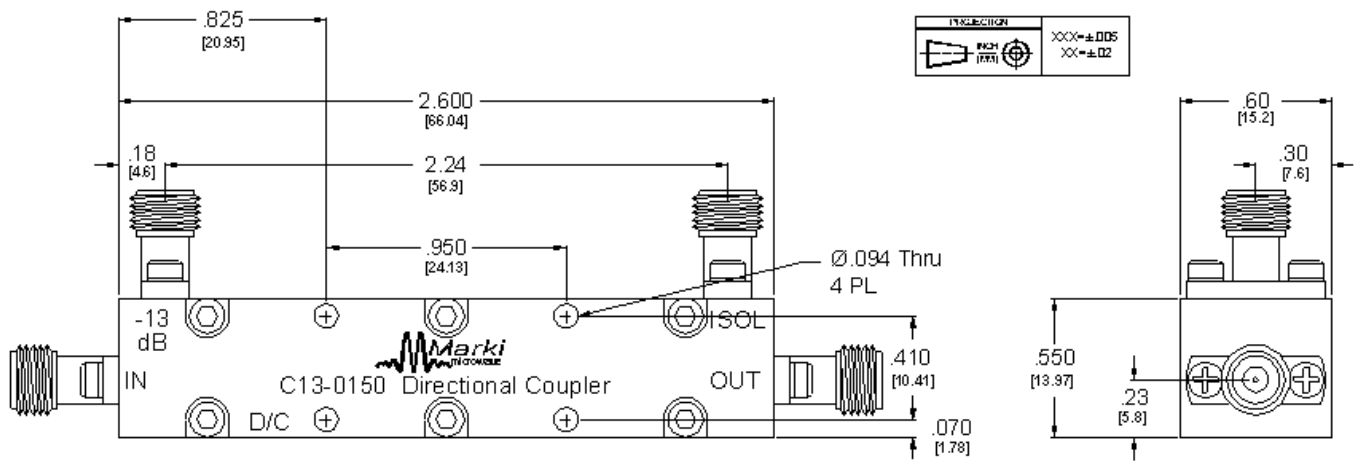
Typical Performance Plots



Mechanical Data

Outline Drawing

Download : [Outline 2D Drawing](#) | [Outline 3D Drawing](#) | [Outline 3D STP](#)



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