

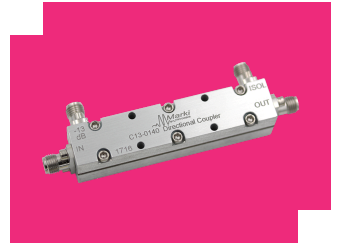
# C13-0140

## DIRECTIONAL COUPLER

### DEVICE OVERVIEW

#### General Description

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.



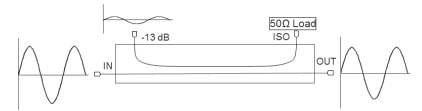
#### Features

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

#### Applications

N/A

#### Functional Block Diagram



#### Part Ordering Options

Part Number	Description	Connectors	Green Status	Product Lifecycle	Export Classification
C13-0140	DIRECTIONAL COUPLER	<u>Standard</u>	REACH RoHS	Released	EAR99

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## Revision History

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

## Specifications

### Absolute Maximum Ratings

Parameter	Maximum Rating	Unit
RF Power Handling	20	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 x 13.97 mm

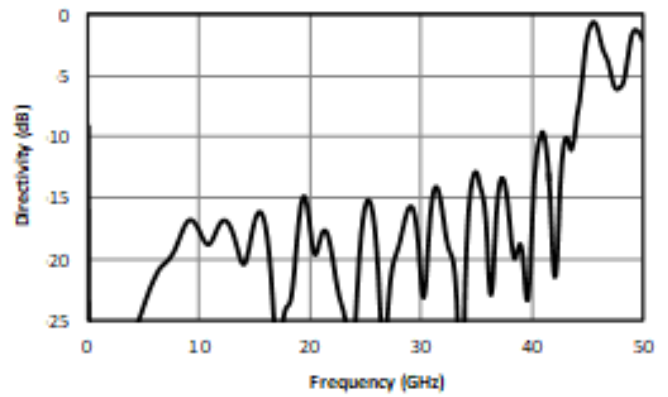
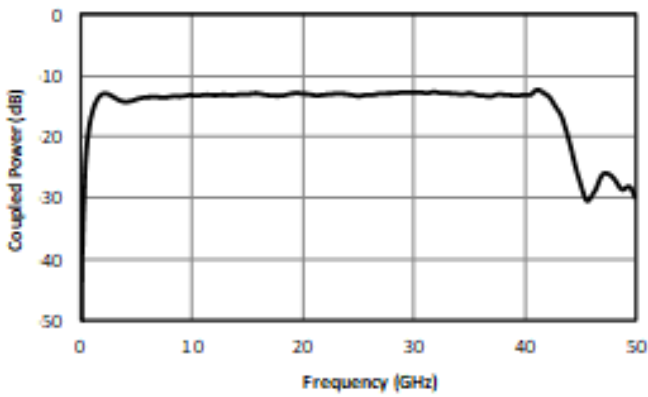
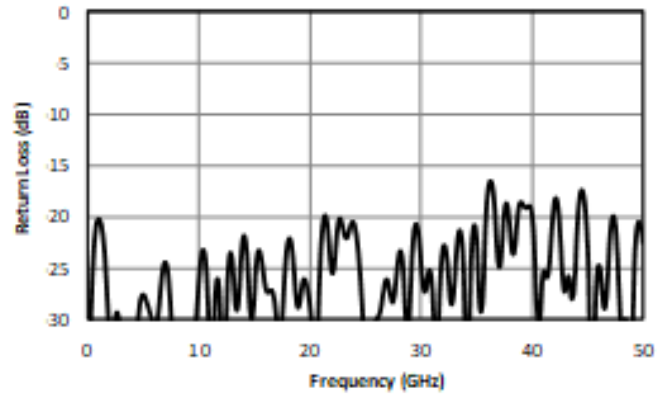
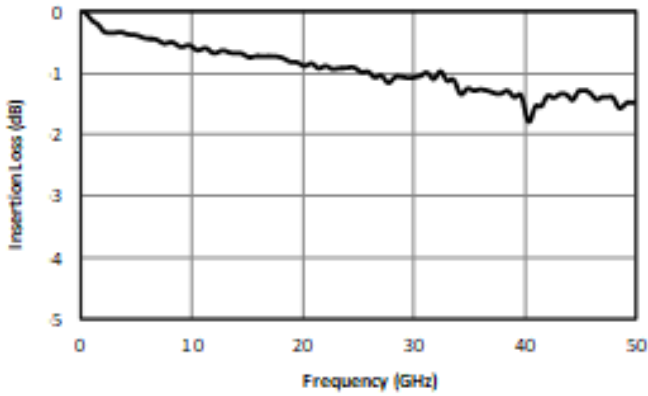
### Electrical Specifications

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 <sup>1</sup>	-	1	40	-	1	2.2	dB
Directivity	-	1	20	13	16	-	dB
Directivity	-	20	40	9	13	-	dB
Direct Line Insertion Loss	DC-40 GHz	-	-	-	-	2.2	dB
Mean Coupling	-	1	40	-	13	-	dB
VSWR	-	1	20	-	1.2	1.45	
VSWR	-	20	40	-	1.45	-	

<sup>[1]</sup> Deviation from average coupling.

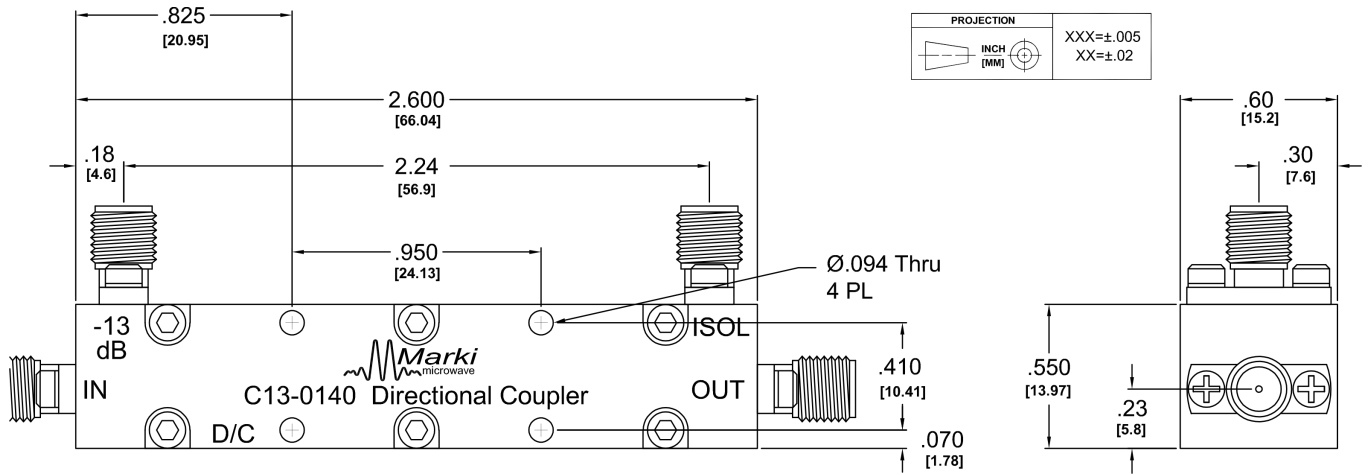
**Typical Performance**



**Mechanical Data**

**Outline Drawing**

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



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