

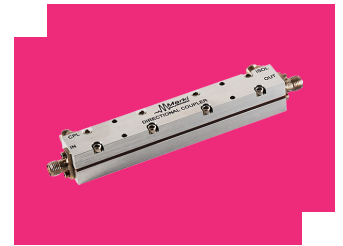
# C10-0116

## DIRECTIONAL COUPLER

### DEVICE OVERVIEW

#### General Description

The C10-0116 is a broadband 1-16 GHz, 10 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.



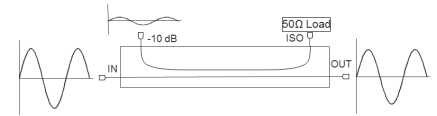
#### Features

- 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
C10-0116	DIRECTIONAL COUPLER	<u>Standard</u>	REACH RoHS	Released	EAR99

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**Revision History**

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

## Port Configuration and Functions

### Port Functions

Port	Function	Connector Type	Description	DC Equivalent Circuit
-10dB	-10dB Coupled Output	SMAF	-10dB coupled output port.	-
IN	RF Input	SMAF	RF input port.	-
ISOL	Isolated	SMAF	Isolated port.	-
OUT	RF Output	SMAF	RF output port.	-

## Specifications

### Absolute Maximum Ratings

Parameter	Maximum Rating	Unit
RF Power Handling	50	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	-	60g
Dimensions	-	93.98 × 13.97 mm

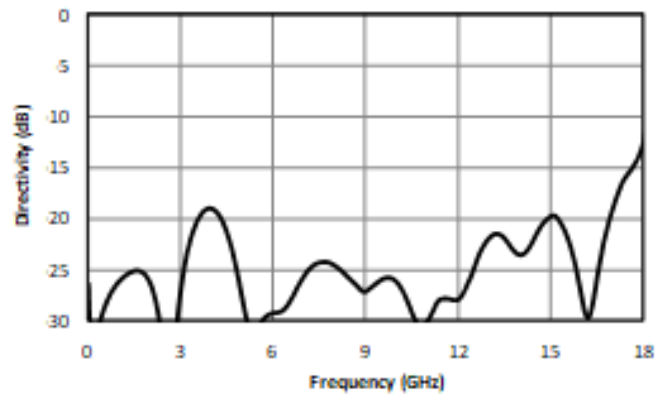
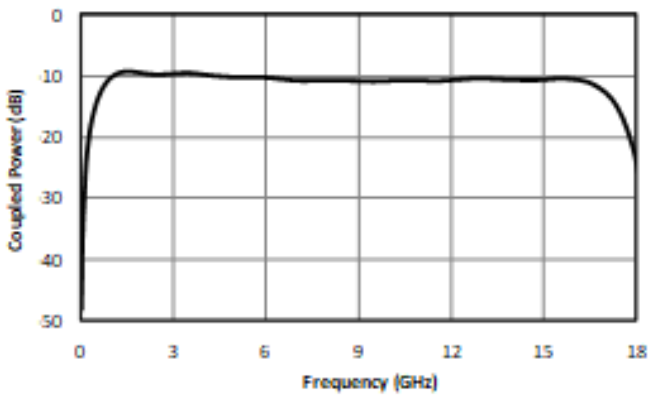
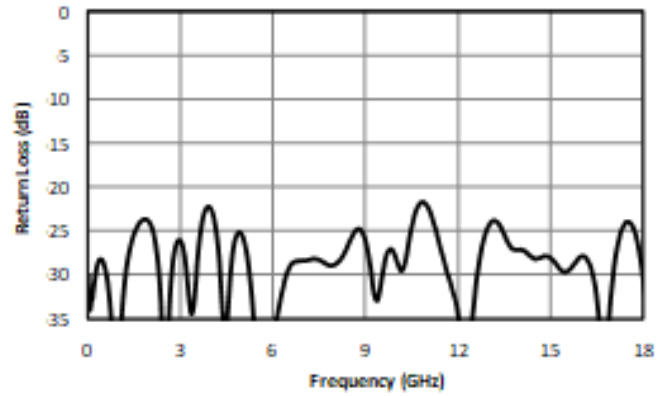
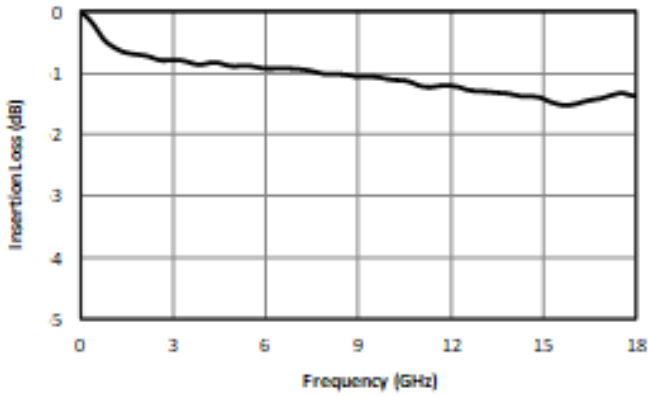
### Electrical Specifications

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	16	-	0.5	1	dB
Directivity	-	1	16	15	20	-	dB
Direct Line Insertion Loss	DC - 16 GHz	-	-	-	-	1.8	dB
Mean Coupling	-	1	16	-	10	-	dB
VSWR	-	1	16	-	1.15	1.35	

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

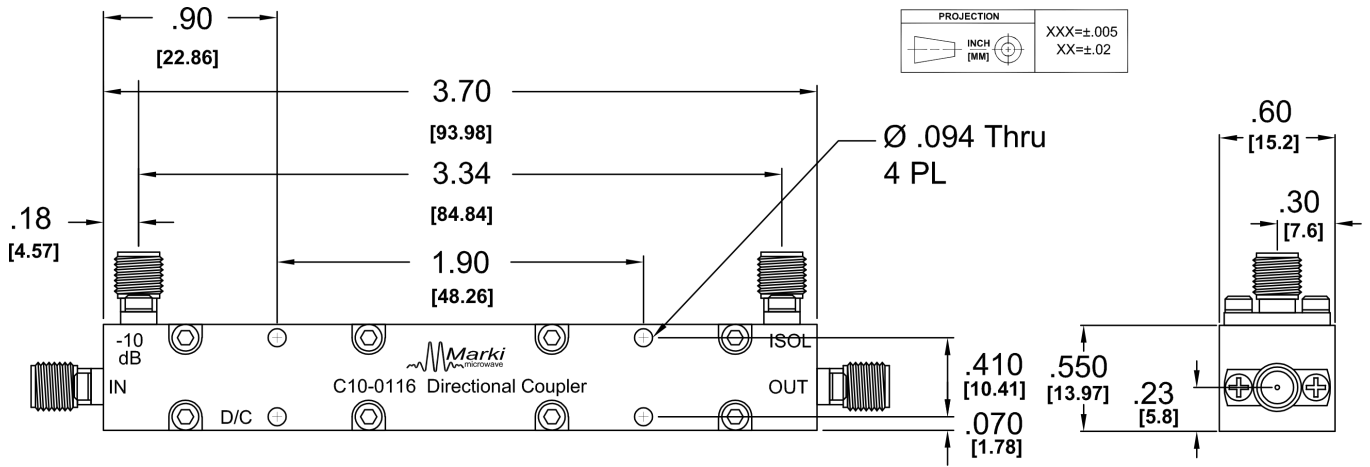
**Typical Performance**



**Mechanical Data**

**Outline Drawing**

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



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