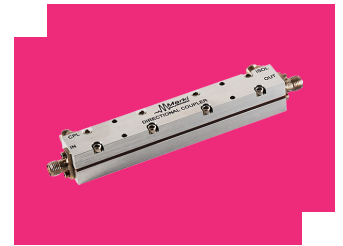


# C09-0R430 DIRECTIONAL COUPLER

## DEVICE OVERVIEW

### General Description

The C09-0R430 is a broadband 0.45-30 GHz, 9 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
- RoHS Compliant

### Applications

N/A

### Functional Block Diagram



### Part Ordering Options

Part Number	Description	Connectors	Green Status	Product Lifecycle	Export Classification
C09-0R430	DIRECTIONAL COUPLER	<u>Standard</u>	Non-RoHS	Released	EAR99

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## Revision History

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

## Port Configuration and Functions

### Port Functions

Port	Function	Connector Type	Description	DC Equivalent Circuit
-9dB	-9dB Coupled Output	2.92F	-9dB coupled output port.	-
IN	RF Input	2.92F	Coupler RF input port.	-
ISOL	Isolated	2.92F	Coupler isolated port.	-
OUT	RF Output	2.92F	Coupler through RF output port.	-

## 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	-	90g
Dimensions	-	142.24 x 13.97 mm

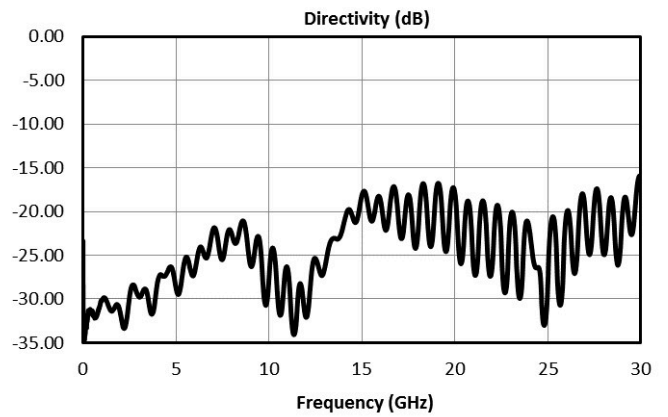
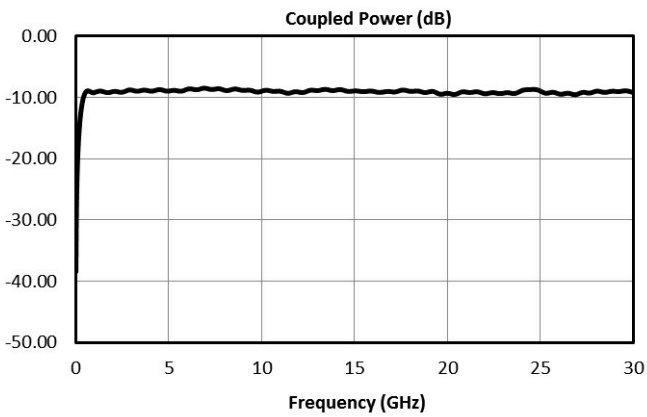
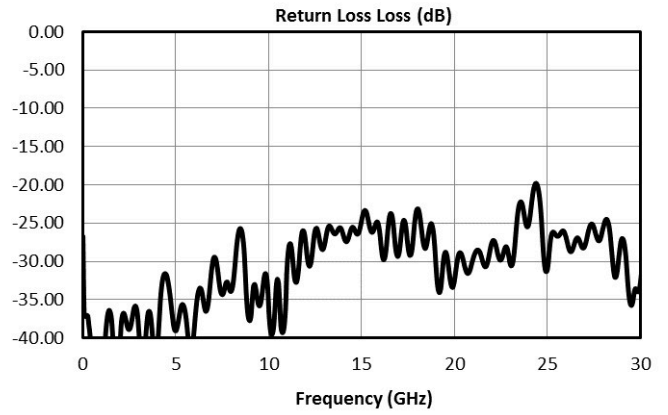
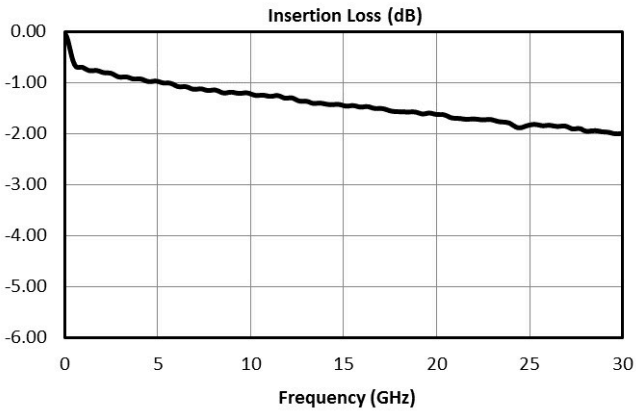
### Electrical Specifications

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>	-	0.45	30	-	0.7	1.4	dB
Directivity	-	0.45	18	15	20	-	dB
Directivity	-	18	30	12	16	-	dB
Direct Line Insertion Loss	DC-30GHz	-	-	-	1.3	2.6	dB
Mean Coupling	-	0.45	30	-	9	-	dB
VSWR	DC-18GHz	-	-	-	1.15	1.45	
VSWR	-	18	30	-	1.3	1.8	

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

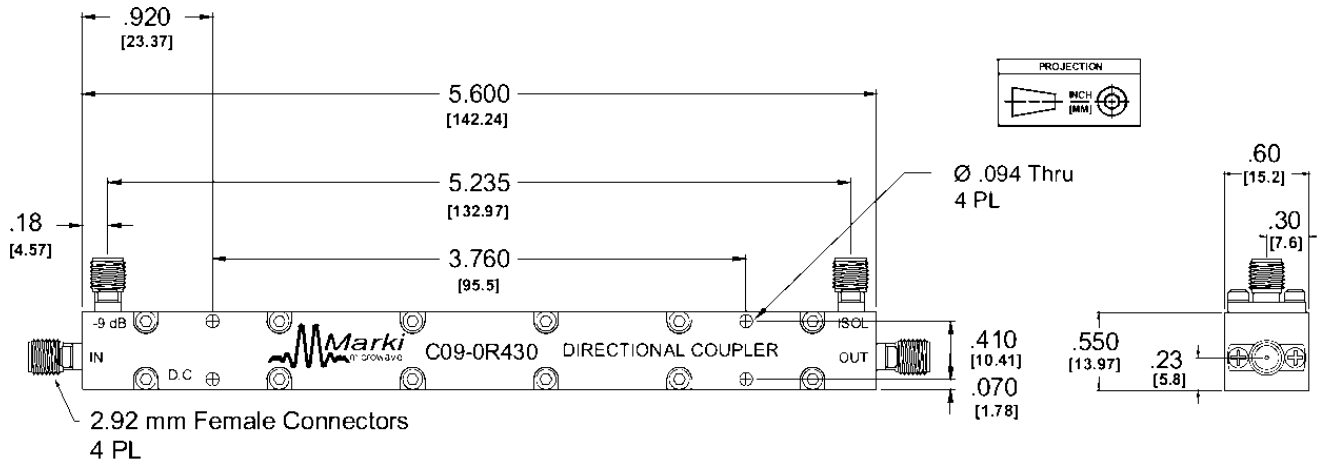
**Typical Performance Plots**



**Mechanical Data**

**Outline Drawing**

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



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