

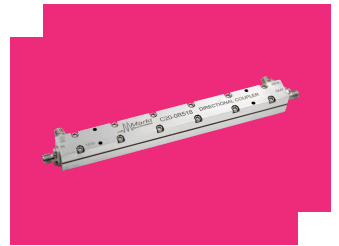
# C20-0R518

## DIRECTIONAL COUPLER

### DEVICE OVERVIEW

#### General Description

The C20-0R518 is a broadband 0.5-18 GHz, 20 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
- High Directivity
- Low VSWR

#### Applications

N/A

#### Functional Block Diagram



#### Part Ordering Options

Part Number	Description	Connectors	Green Status	Product Lifecycle	Export Classification
C20-0R518	DIRECTIONAL COUPLER	<u>Standard</u>	REACH RoHS	Released	EAR99

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**Revision History**

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

**Specifications**

**Absolute Maximum Ratings**

Parameter	Maximum Rating	Unit
RF Power Handling	50	W
Minimum Operating Temperature	-55	°C
Maximum Operating Temperature	100	°C
Maximum Storage Temperature	125	°C
Minimum Storage Temperature	-65	°C

**Package Information**

Parameter	Details	Rating
Weight	-	90g
Dimensions	-	142.24 x 13.97 mm

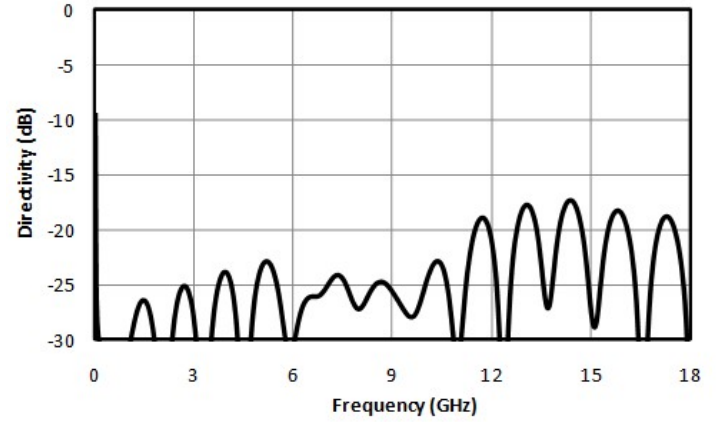
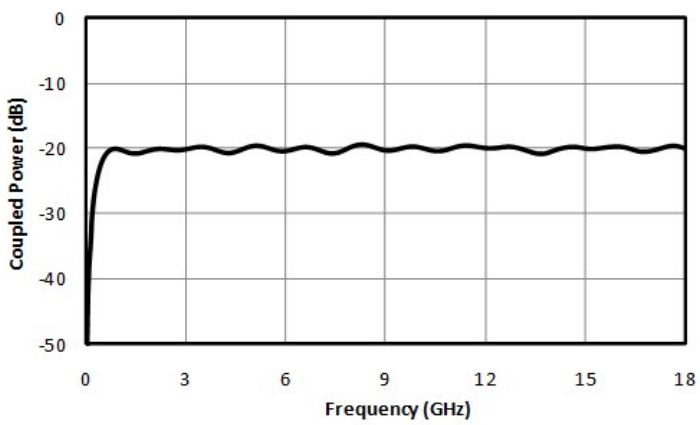
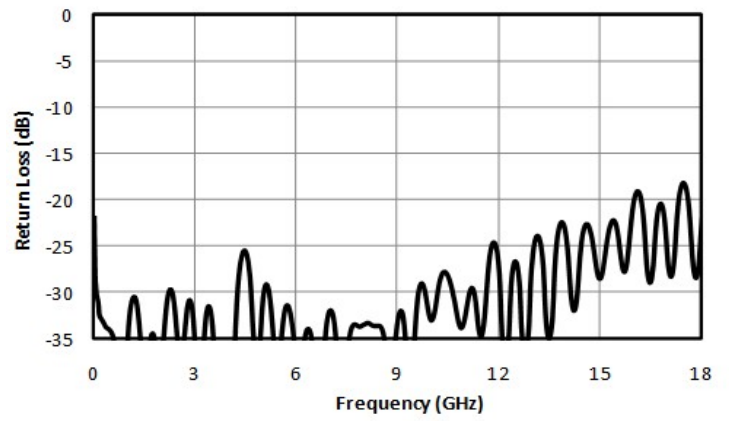
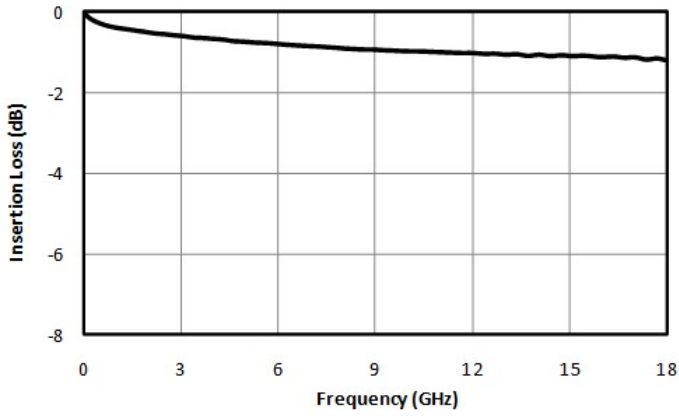
**Electrical Specifications**

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>	-	0.5	18	-	0.75	2	dB
Directivity	-	0.5	12	15	22	-	dB
Directivity	-	12	18	12	16	-	dB
Direct Line Insertion Loss	DC-18	-	-	-	-	1.4	dB
Mean Coupling	-	0.5	18	-	20	-	dB
VSWR	-	0.5	18	-	1.2	1.35	

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

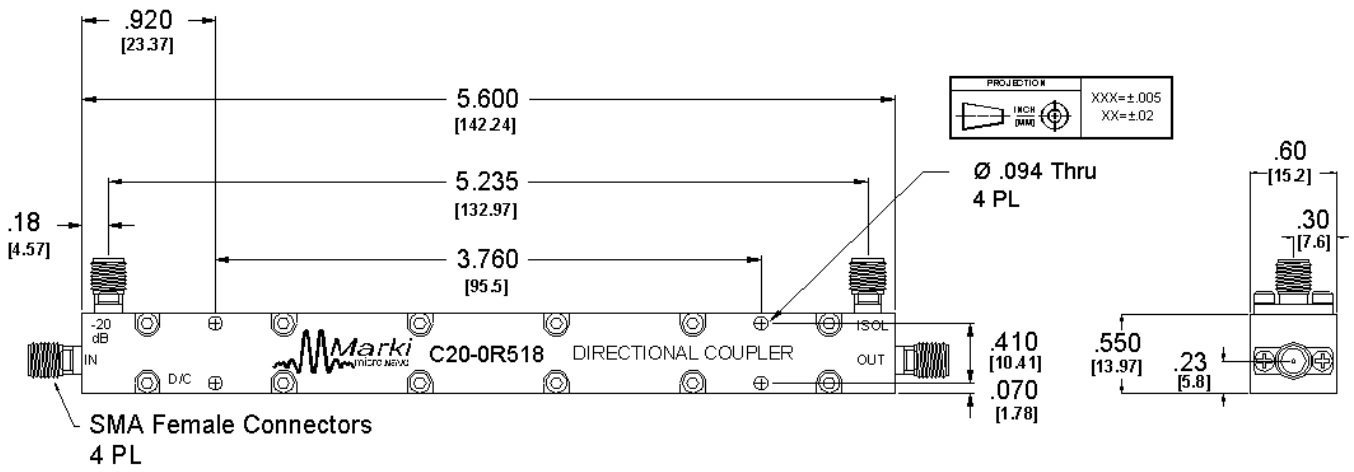
**Typical Performance Plots**



**Mechanical Data**

**Outline Drawing**

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



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