

## LEAD-FREE / RoHS-COMPLIANT

### DIRECTIONAL COUPLER

**C20-0R518**

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

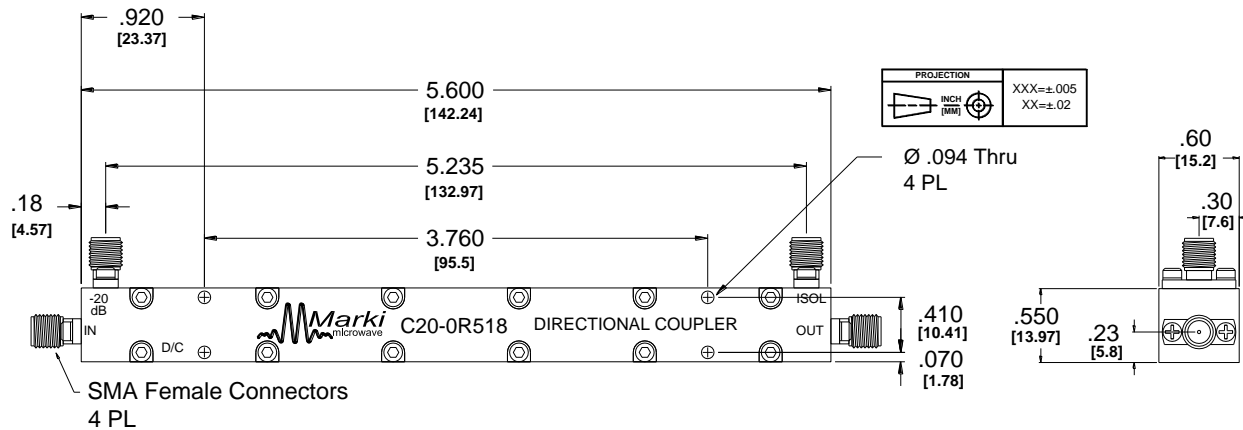


#### Electrical Specifications

Parameter <sup>1</sup>	Frequency Range (GHz)	Min	Typ	Max
Mean Coupling (dB)	0.5-18		20	
Amplitude Flatness (dB) <sup>2</sup>			±0.75	±2
Direct Line Insertion Loss (dB)	DC-18			1.4
VSWR	0.5-18		1.2	1.35
Directivity (dB)	0.5-12	15	22	
	12-18	12	16	
Weight (g)			90	

<sup>1</sup>Specifications guaranteed when operated in a 50Ω system.

<sup>2</sup>Deviation from average coupling.



# DIRECTIONAL COUPLER

**C20-0R518**

Page 2

## Typical Performance

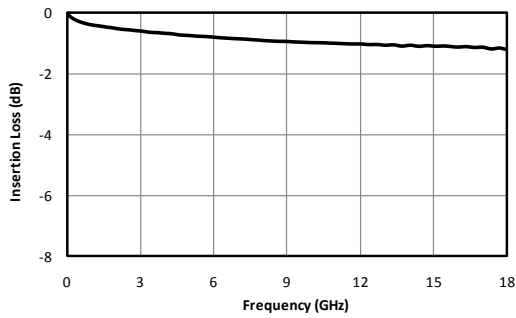


Fig. 1. Direct line insertion loss.

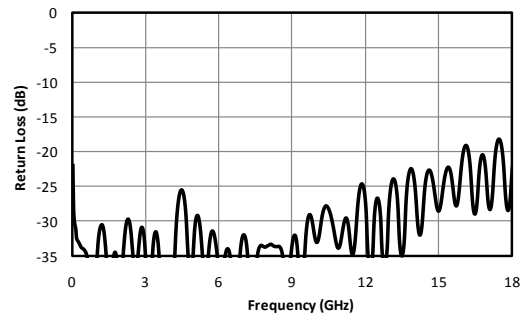


Fig. 2. Typical port return loss.

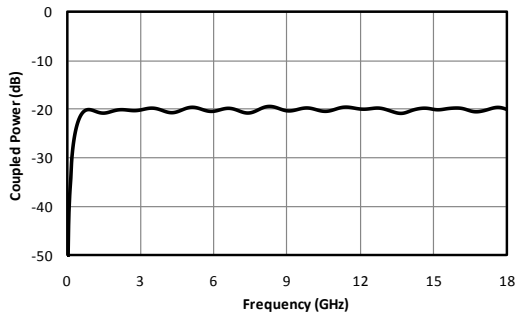


Fig. 3. Coupled port power.

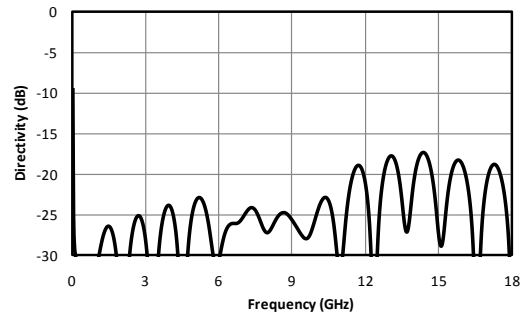


Fig. 4. Typical directivity.



## DIRECTIONAL COUPLER

**C20-0R518**

Page 3

Model Number	Description
C20-0R518	0.5-18 GHz 20 dB Directional Coupler with SMA connectors <sup>1</sup> , <b>LEAD-FREE/RoHS COMPLIANT</b>

<sup>1</sup>Default is SMA female connectors. Consult factory for other connector options.

### Revision History

Revision code	Revision Date	Comment
D	4/2020	Updated Direct Line IL specs