

## Flatpack Two-Way Power Divider 5-1000 MHz

Rev. V3

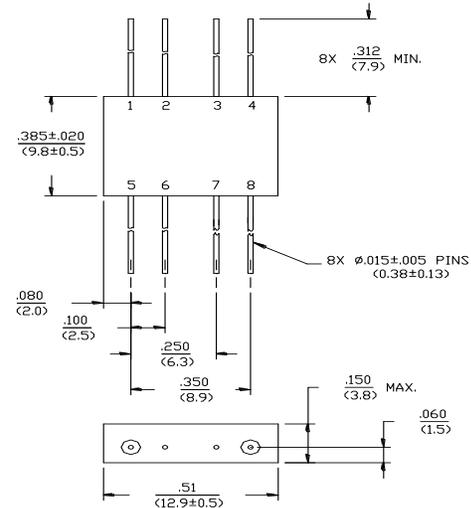
### Features

- n Broadband, IN Phase Divider
- n Low Loss: 0.3 dB Typical
- n Amplitude Balance: 0.05 dB Typical
- n Impedance: 50 Ohms Nominal
- n Maximum Power Rating or Input Power: 1 Watt Max.
- n Internal Load Dissipation: 0.05 Watts Max.
- n MIL-STD-883 Screening Available

### Description

A Power Divider is ideally a loss less reciprocal device which can also perform vector summation of two or more signals and thus is sometimes called a power combiner or summer.

### Functional Schematic



Dimensions in  $\circ$  are in mm  
 Unless Otherwise Noted: .XXX =  $\pm 0.010$  (.XX =  $\pm 0.25$ )  
 .XX =  $\pm 0.02$  (.X =  $\pm 0.5$ )  
 WEIGHT (APPROX): 0.09 OUNCES 2.55 GRAMS

### Pin Configuration<sup>3</sup>

Pin No.	Function	Pin No.	Function
1	$\Sigma$	11	GND
2	GND	12	GND
3	GND	13	GND
4	Output C	14	Output D

### Ordering Information<sup>1,2</sup>

Part Number	Package
DS-327 PIN	FP-2

1. Reference Application Note M513 for reel size information.
2. All sample boards include x loose parts.

3. MACOM recommends connecting unused package pins to ground.
4. The exposed pad centered on the package bottom must be connected to RF, DC and thermal ground.

\* Restrictions on Hazardous Substances, European Union Directive 2011/65/EU.

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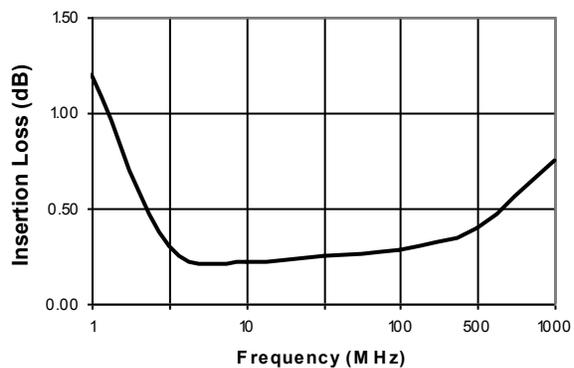
**Electrical Specifications<sup>1</sup>: T<sub>A</sub> = -55°C to +85°C**

Parameter	Test Conditions	Frequency	Units	Min	Typ	Max
Insertion Loss	Less Coupling	5 - 500 MHz	dB	—	—	0.5
		500 - 1000 MHz	dB	—	—	1.0
Isolation	—	5 - 500 MHz	dB	25	—	—
		500 - 1000 MHz	dB	20	—	—
Amplitude Balance	—	5 - 1000 MHz	dB	—	—	0.2
Phase Balance	—	5 - 500 MHz	°	—	—	2
		500 - 1000 MHz	°	—	—	3
VSWR	Input Output	10 - 500 MHz	Ratio	—	—	1.3:1
		5 - 1000 MHz	Ratio	—	—	1.5:1

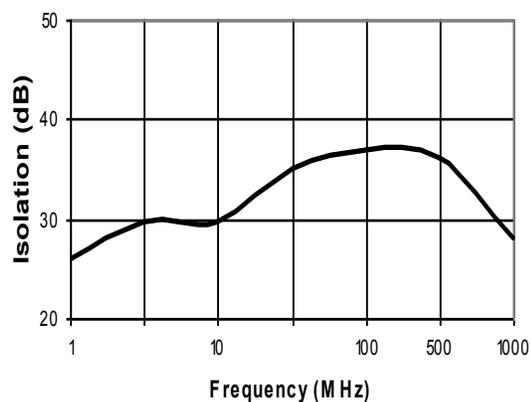
1. All specifications apply with 50 ohm source and load impedance.

### Typical Performance Curves

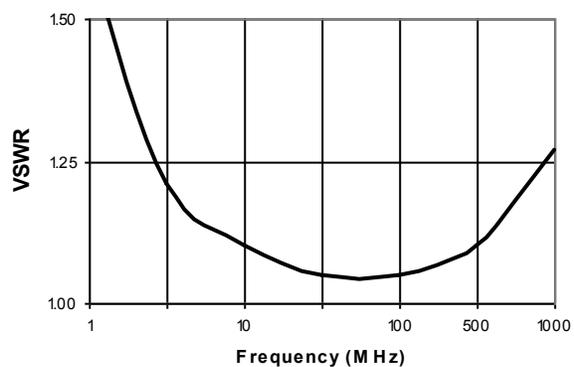
#### Insertion Loss



#### Isolation



#### VSWR



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