

Flatpack Two-Way Power Divider 5-1000 MHz

Rev. V3

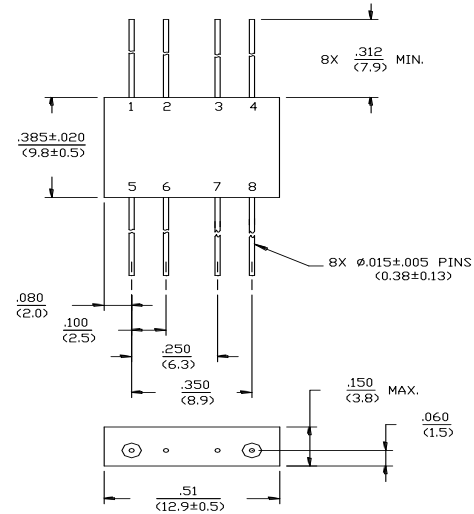
Features

- 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 = ± 0.010 (.XX = ± 0.25)
 .XX = ± 0.02 (.X = ± 0.5)
 WEIGHT (APPROX): 0.09 OUNCES 2.55 GRAMS

Pin Configuration³

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

Ordering Information^{1,2}

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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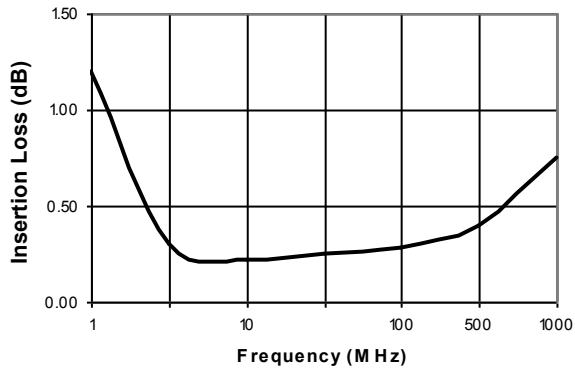
Electrical Specifications¹: T_A = -55°C to +85°C

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

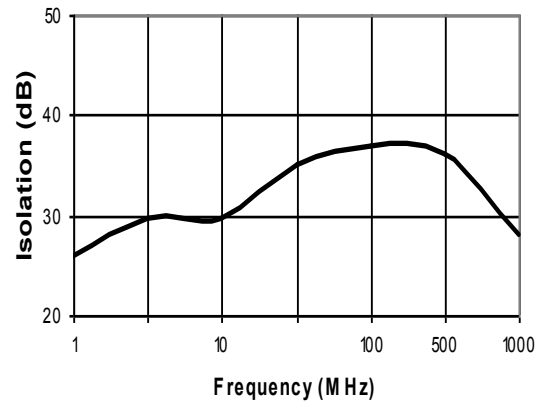
1. All specifications apply with 50 ohm source and load impedance.

Typical Performance Curves

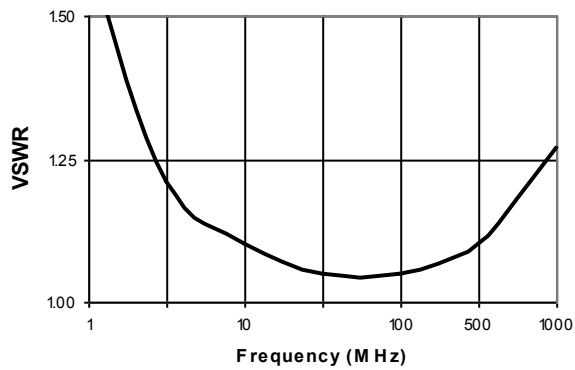
Insertion Loss



Isolation



VSWR



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