Two-Way Power Divider, 10 - 2000 MHz

V 3.00

DS-/DSS-313

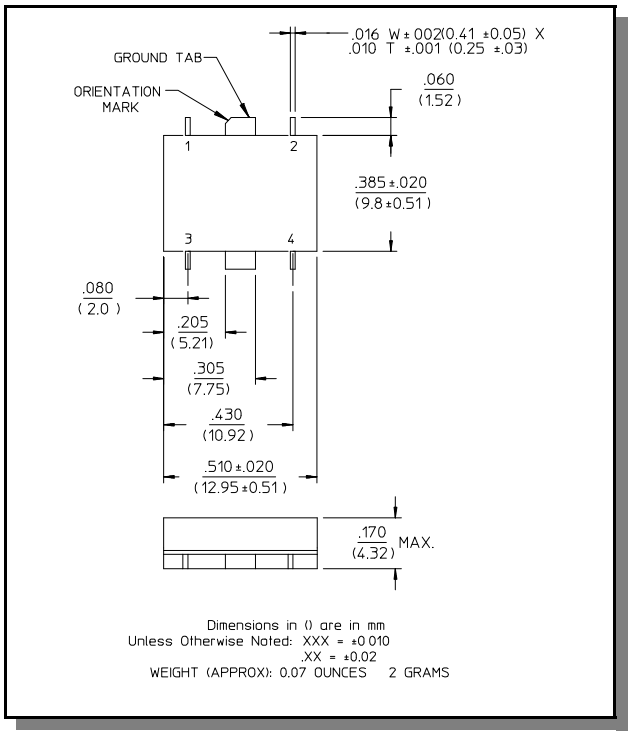
Features

- Fully Hermetic Package
- Loss: 0.6 dB Typical Midband
- Isolation: 28 dB Typical Midband
- VSWR: 1.2:1 Typical Midband
- Impedance: 50 Ohms Nominal
- Maximum Power Rating or Input Power: 250 mW Max.
- Internal Load Dissipation: 50 mW Max.
- MIL-STD-202 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.

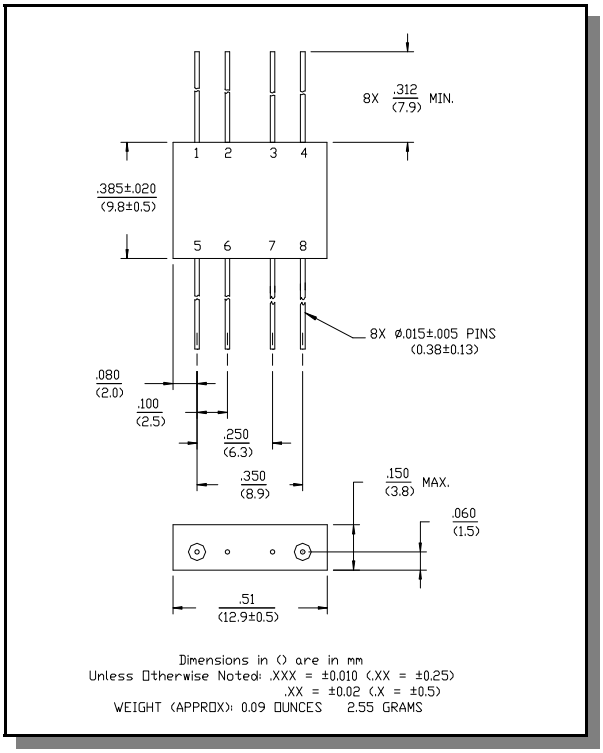
SF-1 (DSS-313)



Pin Configuration (DSS-313)

Pin No.	Function	Pin No.	Function
1	Σ	3	GND
2	Output C	4	Output D

FP-2 (DS-313)



Pin Configuration (DS-313)

Pin No.	Function	Pin No.	Function
1	Σ	5	GND
2	GND	6	GND
3	GND	7	GND
4	Output C	8	Output D

DS-313 Electrical Specifications[1]: T_A = -55°C to +85°C

Parameter	Test Conditions	Frequency	Units	Min	Typ	Max
Insertion Loss	Less Coupling	20 - 1000 MHz 10 - 1500 MHz 1500 - 2000 MHz	dB dB dB	— — —	— — —	1.1 1.3 1.8
Isolation	—	20 - 1000 MHz 10 - 1500 MHz 1500 - 2000 MHz	dB dB dB	23 18 12	— — —	— — —
Amplitude Balance	—	20 - 1000 MHz 10 - 1500 MHz 1500 - 2000 MHz	dB dB dB	— — —	— — —	0.3 0.4 0.6
Phase Balance	—	20 - 1000 MHz 10 - 1500 MHz 1500 - 2000 MHz	° ° °	— — —	— — —	4 6 8
VSWR	All Ports	20 - 1000 MHz 10 - 1500 MHz 1500 - 2000 MHz	Ratio Ratio Ratio	— — —	— — —	1.5:1 1.6:1 1.8:1

DSS-113 Electrical Specifications[1]: T_A = -55°C to +85°C

Parameter	Test Conditions	Frequency	Units	Min	Typ	Max
Insertion Loss	Less Coupling	20 - 1000 MHz 10 - 1500 MHz 1500 - 2000 MHz	dB dB dB	— — —	— — —	1.1 1.3 1.8
Isolation	—	20 - 1000 MHz 10 - 1500 MHz 1500 - 2000 MHz	dB dB dB	22 18 12	— — —	— — —
Amplitude Balance	—	20 - 1000 MHz 10 - 1500 MHz 1500 - 2000 MHz	dB dB dB	— — —	— — —	0.3 0.4 0.6
Phase Balance	—	20 - 1000 MHz 10 - 1500 MHz 1500 - 2000 MHz	° ° °	— — —	— — —	5 8 11
VSWR	All Ports	20 - 1000 MHz 10 - 1500 MHz 1500 - 2000 MHz	Ratio Ratio Ratio	— — —	— — —	1.5:1 1.6:1 1.8:1

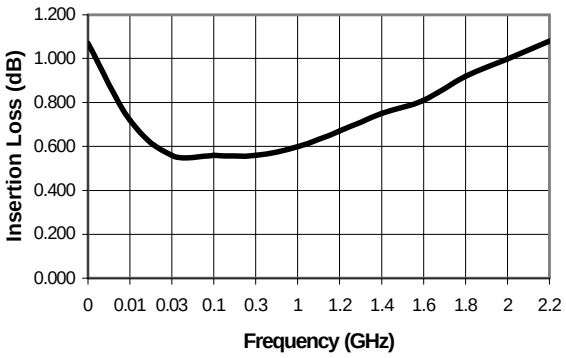
1. All specifications apply with 50 ohm source and load impedance.

Visit www.macom.com for additional data sheets and product information.

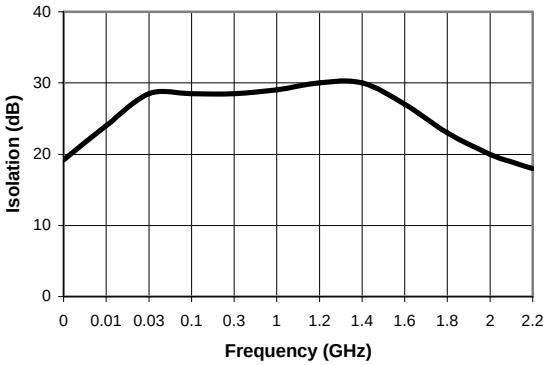
- **North America:** Tel. (800) 366-2266
- **Asia/Pacific:** Tel.+81-44-844-8296, Fax +81-44-844-8298
- **Europe:** Tel. +44 (1344) 869 595, Fax+44 (1344) 300 020

Typical Performance Curves

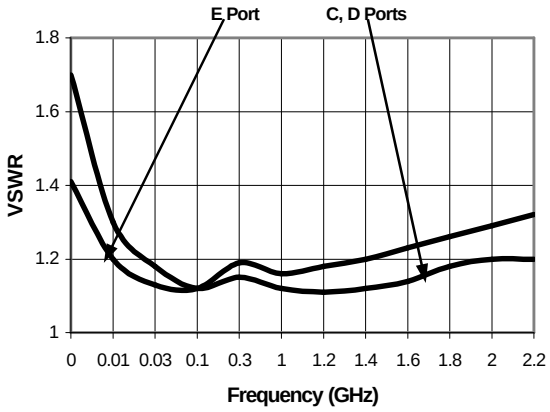
Insertion Loss - Ports S-C, S-D



Isolation - Ports C-D



VSWR



Ordering Information

Part Number	Package
DS-313 PIN	FP-2
DSS-313 PIN	SF-1

Visit www.macom.com for additional data sheets and product information.

- **North America:** Tel. (800) 366-2266
- **Asia/Pacific:** Tel.+81-44-844-8296, Fax +81-44-844-8298
- **Europe:** Tel. +44 (1344) 869 595, Fax+44 (1344) 300 020