

Two-Way Power Divider, 400 KHz - 400 MHz

Rev. V3

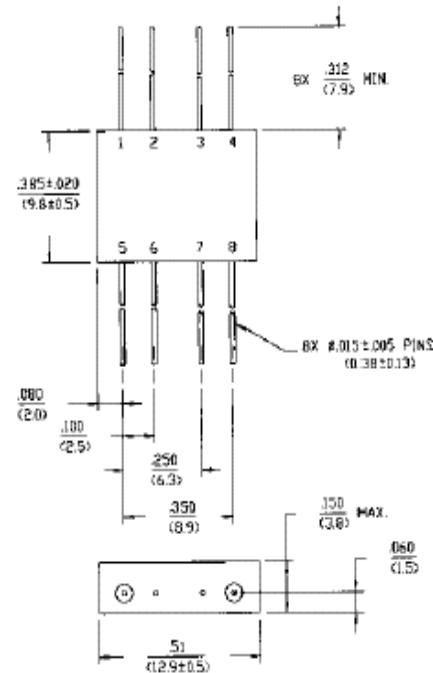
Features

- Fully Hermetic Package (DSS-113)
- Three Decade Bandwidth
- Low Loss: 0.25 dB Typical
- Impedance: 50 Ohms Nominal
- Maximum Power Rating or Input Power: 1W Max.
- Internal Load Dissipation: 0.05 W Max.
- MIL-STD-202 Screening Available

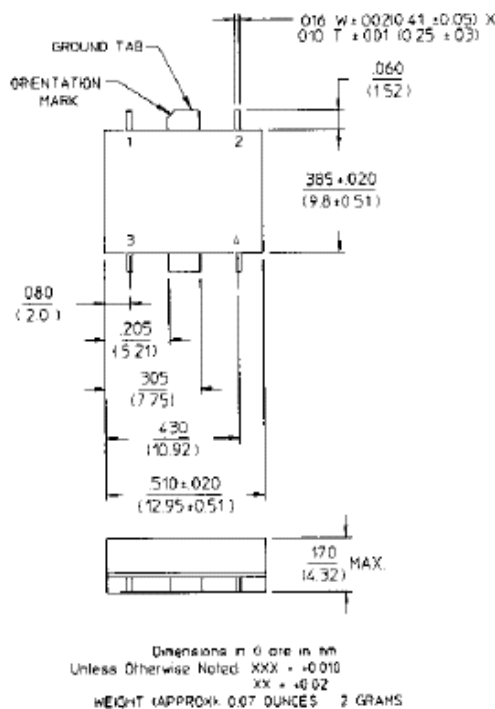
Description

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

FP-2 (DS-113)



SF-1 (DSS-113)



Pin Configuration (DS-113)

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

Pin Configuration (DSS-113)

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

DS-113 Electrical Specifications¹: $T_A = -55^{\circ}\text{C}$ to $+85^{\circ}\text{C}$

Parameter	Test Conditions	Frequency	Units	Min	Typ	Max
Insertion Loss	Less Coupling	0.4 - 400 MHz	dB	—	—	0.75
Isolation	—	0.4 - 400 MHz	dB	25	—	—
Amplitude Balance	—	0.4 - 400 MHz	dB	—	—	0.15
Phase Balance	—	0.4 - 400 MHz	°	—	—	1.0
VSWR	All Ports	0.4 - 400 MHz	Ratio	—	—	1.5:1

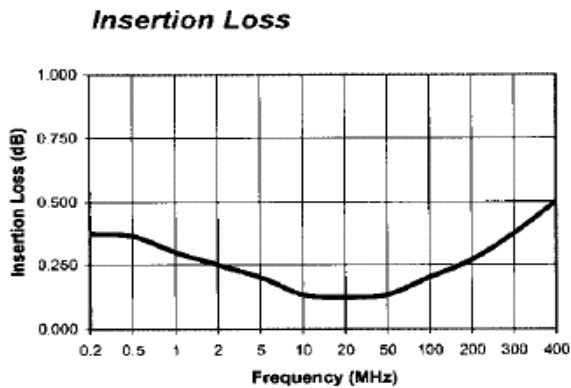
DSS-113 Electrical Specifications¹: $T_A = -55^{\circ}\text{C}$ to $+85^{\circ}\text{C}$

Parameter	Test Conditions	Frequency	Units	Min	Typ	Max
Insertion Loss	Less Coupling	0.4 - 400 MHz	dB	—	—	0.75
Isolation	—	0.4 - 400 MHz	dB	25	—	—
Amplitude Balance	—	0.4 - 400 MHz	dB	—	—	0.15
Phase Balance	—	0.4 - 400 MHz	°	—	—	1.5
VSWR	All Ports	0.4 - 400 MHz	Ratio	—	—	1.6:1

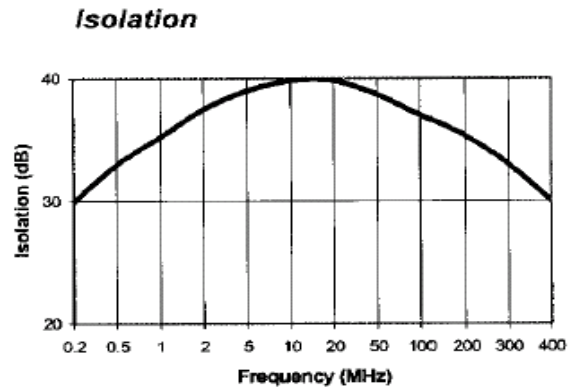
1. All specifications apply with 50 ohm source and load impedance.

Typical Performance Curves

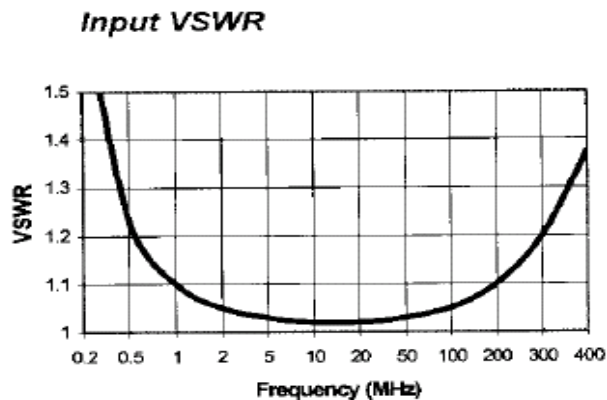
Insertion Loss



Isolation



VSWR



Ordering Information

Part Number	Package
DS-113 PIN	FP-2
DSS-113 PIN	SF-1

Output VSWR

