

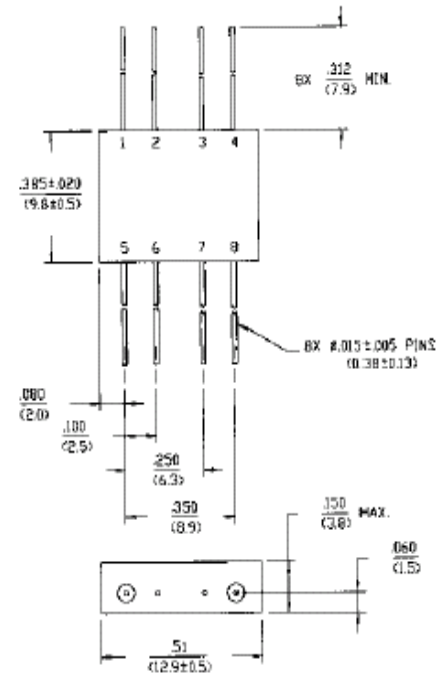
## Features

- 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

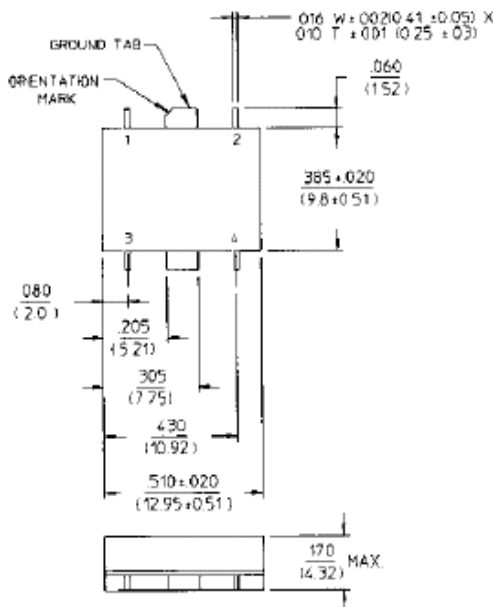
A Power Divider is ideally a lossless reciprocal device which can also perform vector summation of two or more signals and thus is sometimes called a power combiner or summer.

## FP-2 (DS-113)



Dimensions in  $\text{\AA}$  are in mm  
Unless Otherwise Noted: .XXX =  $\pm 0.010$  (XX =  $\pm 0.25$ )  
XX =  $\pm 0.02$  (X =  $\pm 0.01$ )  
WEIGHT (APPROX): 0.09 OUNCES 2.55 GRAMS

## SF-1 (DSS-113)



Dimensions in  $\text{\AA}$  are in mm  
Unless Otherwise Noted: XXX =  $\pm 0.010$   
XX =  $\pm 0.02$   
WEIGHT (APPROX): 0.07 OUNCES 2 GRAMS

## Pin Configuration (DS-113)

Pin No.	Function	Pin No.	Function
1	$\Sigma$	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	$\Sigma$	3	GND
2	Output C	4	Output D

## DS-113 Electrical Specifications<sup>1</sup>: $T_A = -55^{\circ}\text{C}$ 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

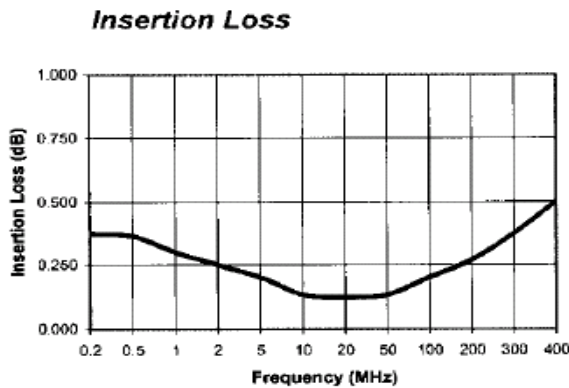
## DSS-113 Electrical Specifications<sup>1</sup>: $T_A = -55^{\circ}\text{C}$ to $+85^{\circ}\text{C}$

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

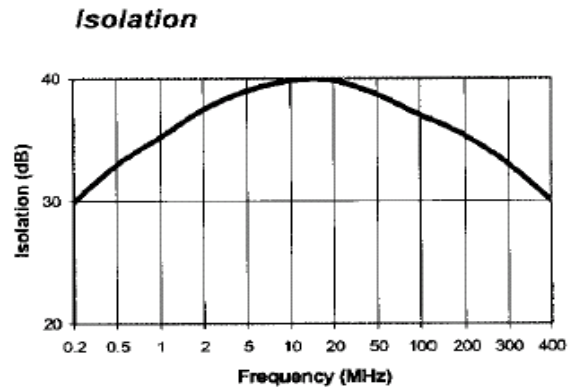
1. All specifications apply with 50 ohm source and load impedance.

## Typical Performance Curves

*Insertion Loss*

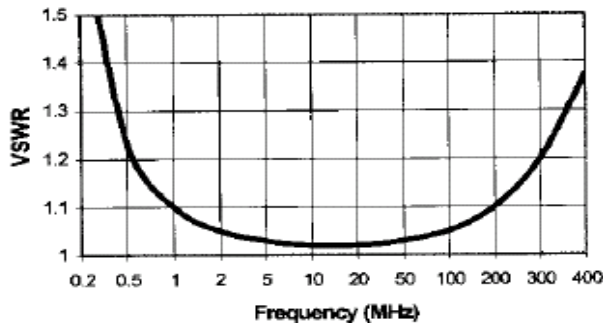


*Isolation*

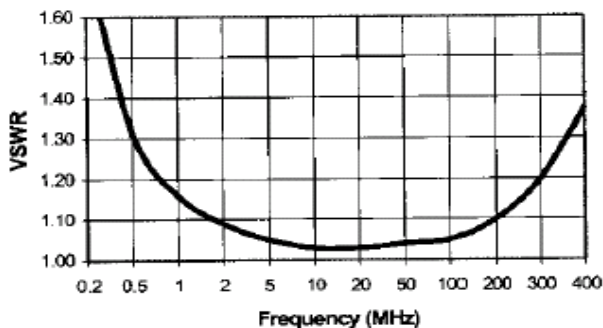


*VSWR*

*Input VSWR*



*Output VSWR*



## Ordering Information

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