

**Two-Way Power Divider,
400 KHz - 400 MHz**

**DS-/DSS-113
V3**

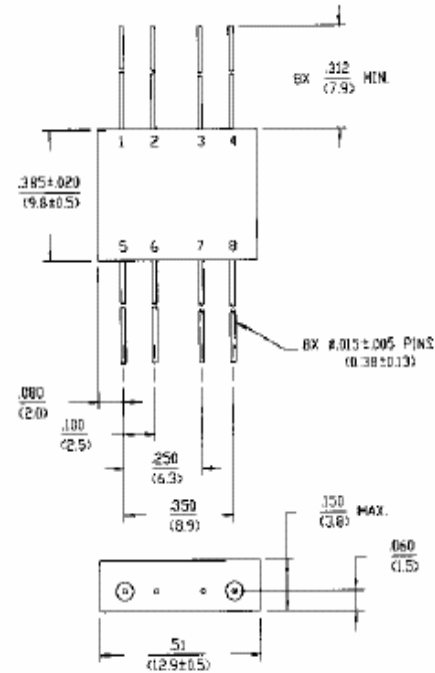
Features

- 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

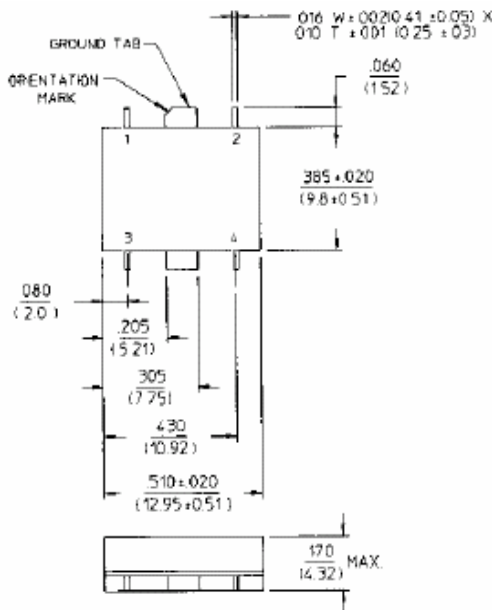
A Power Divider is ideally a lossless reciprocal device which can also perform vector summation of two or more signals and thus is sometimes called a power combiner or summer.

FP-2 (DS-113)



Dimensions in ϕ 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

SF-1 (DSS-113)



Dimensions in ϕ are in mm
Unless Otherwise Noted: XXX = ± 0.010
xx = ± 0.02
WEIGHT (APPROX): 0.07 OUNCES 2 GRAMS

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)

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1	Σ	3	GND
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DS-113 Electrical Specifications¹: T_A = -55°C to +85°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

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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

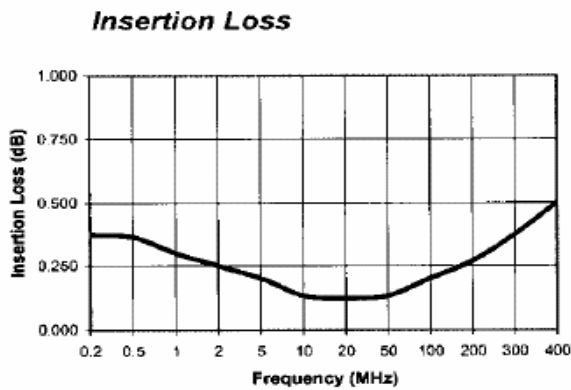
1. All specifications apply with 50 ohm source and load impedance.

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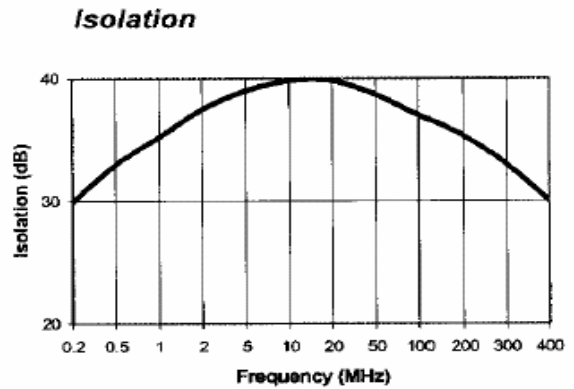
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Typical Performance Curves

Insertion Loss

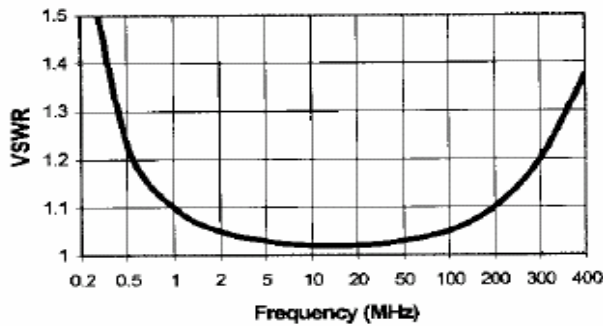


Isolation

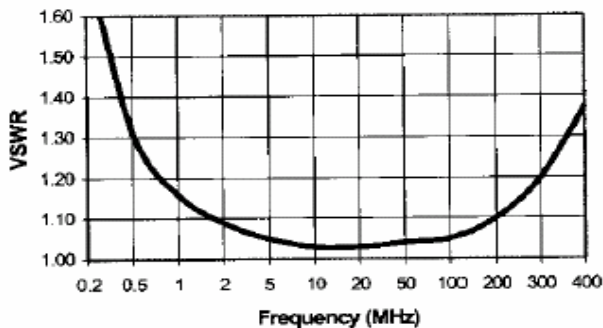


VSWR

Input VSWR



Output VSWR



Ordering Information

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