DS- / DSS-113

Two-Way Power Divider 400 KHz - 400 MHz

Features

- Fully Hermetic Package (DSS-113)
- Three Decade Bandwidth
- Low Loss: 0.25 dB
- Impedance: 50 Ω nominal
- Maximum Power Rating or Input Power: 1 Watt
- Internal Load Dissipation: 0.05 Watts 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-113)



Dimensions in 0 are in mm Unless Otherwise Noted: .XXX = ±0.010 .XX = ±0.02 WEIGHT (APPROX): 0.07 OUNCES 2 GRAMS

Pin Configuration (DSS-113)

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

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Ordering Information

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

FP-2 (DS-113)



 $\begin{array}{c} \mbox{Dimensions in C} \mbox{ are in mm} \\ \mbox{Unless Itherwise Noted: } XXX = \pm 0.010 \ (XX = \pm 0.25) \\ XX = \pm 0.02 \ (X = \pm 0.5) \\ \mbox{WEIGHT (APPRIX): } 0.09 \ \mbox{DUNCES } 2.55 \ \mbox{GRAMS} \end{array}$

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

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Two-Way Power Divid	ler
400 KHz - 400 MHz	

DS-113 Electrical Specifications¹: Freq. = 0.4 - 400 MHz, T_A = -55°C to +85°C

Parameter	Test Conditions	Units	Min.	Тур.	Max.
Insertion Loss ²	Less Coupling	dB	—	—	0.75
Isolation	—	dB	25	—	_
Amplitude Balance	—	dB	—	—	0.15
Phase Balance	—	0	—	—	1.0
VSWR	All Ports	Ratio	—	—	1.5:1

DSS-113 Electrical Specifications¹: Freq. = 0.4 - 400 MHz, T_A = -55° C to $+85^{\circ}$ C

Parameter	Test Conditions	Units	Min.	Тур.	Max.
Insertion Loss ²	Less Coupling	dB	—	_	0.75
Isolation	_	dB	25	_	_
Amplitude Balance	—	dB	—	—	0.15
Phase Balance	_	o	—	_	1.5
VSWR	All Ports	Ratio	—	—	1.6:1

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

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Two-Way Power Divider 400 KHz - 400 MHz

Typical Performance Curves:







Input VSWR



Output VSWR



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Rev. V4

Two-Way Power Divider 400 KHz - 400 MHz



Rev. V4

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