

3-Way Power Divider 1 - 300 MHz

Rev. V3

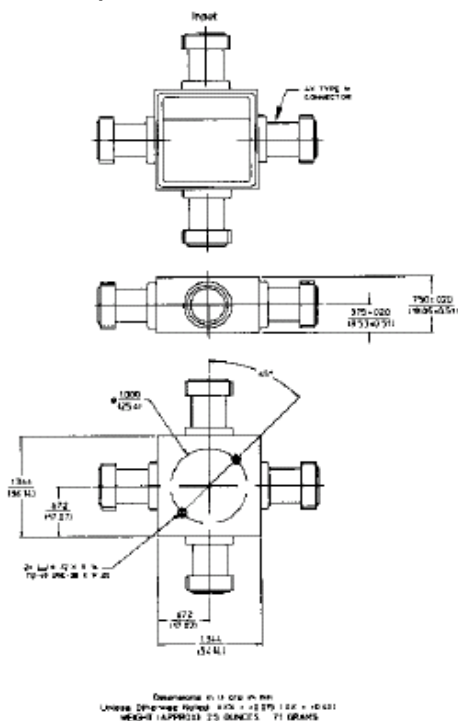
Features

- Low Loss: 0.5 dB Typical
- Impedance: 50 Ohms Nominal
- Power Rating: 1W Max.
- Internal Load Dissipation: 0.05 W Max.
- Flatpack and Connectorized Packages
- MIL-STD-202 Screening Available

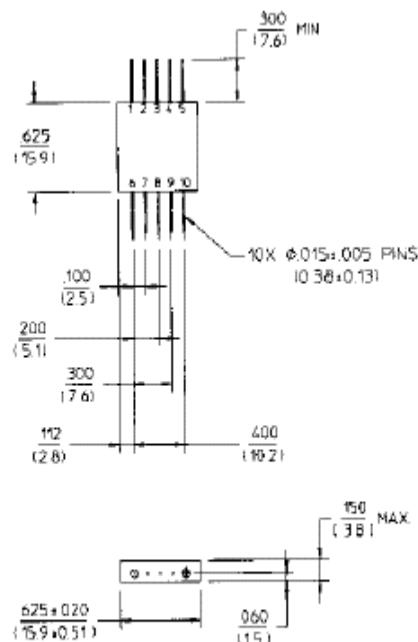
Description

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.

C-8 (DS-308)



FP-3 (DS-117)



Dimensions in U are in mm
Unless Otherwise Noted XXX = ± 0.010 (XX = ± 0.25)
XX = ± 0.02 (X = ± 0.5)
WEIGHT (APPROX): 0.12 OUNCES 3.4 GRAMS

Pin Configuration (DS-117)

Pin No.	Function	Pin No.	Function
1	GND	5	Output
2	GND	6	GND
3	Input	7	Output
4	GND	8	GND
5	GND	10	Output

Ordering Information

Part Number	Package
DS-117 PIN	FP-3
DS-308 BNC	C-8
DS-308 N	C-8
DS-308 SMA	C-8

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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	2 - 200 MHz 1 - 300 MHz	dB dB	— —	— —	0.75 1.0
Isolation	—	2 - 200 MHz 1 - 300 MHz	dB dB	30 20	— —	— —
Amplitude Balance	—	1 - 300 MHz	dB	—	—	0.25
Phase Balance	—	2 - 200 MHz 1 - 300 MHz	$^{\circ}$ $^{\circ}$	— —	— —	3 4
VSWR	All Ports	2 - 200 MHz 1 - 300 MHz	Ratio Ratio	— —	— —	1.3:1 1.5:1

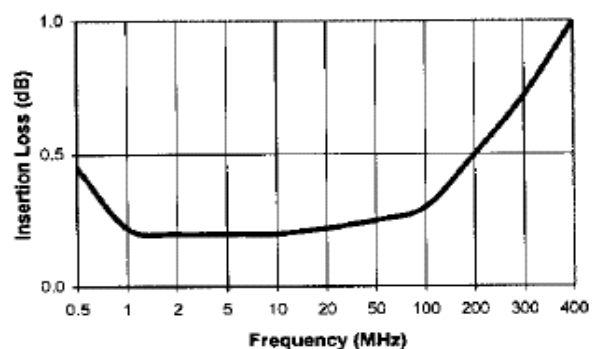
1. All specifications apply with 50 ohm source and load impedance.

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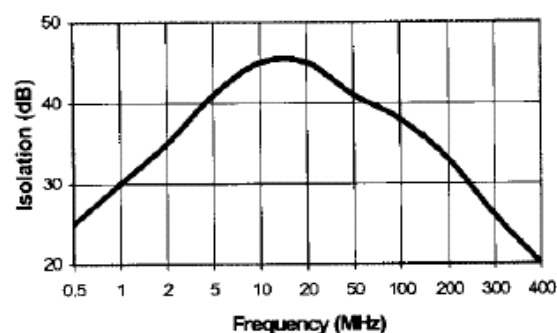
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Typical Performance Curves

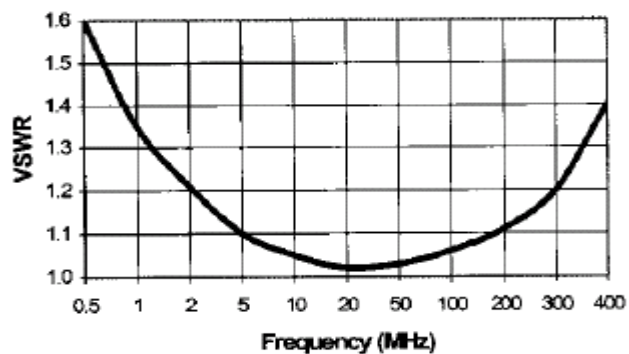
Insertion Loss



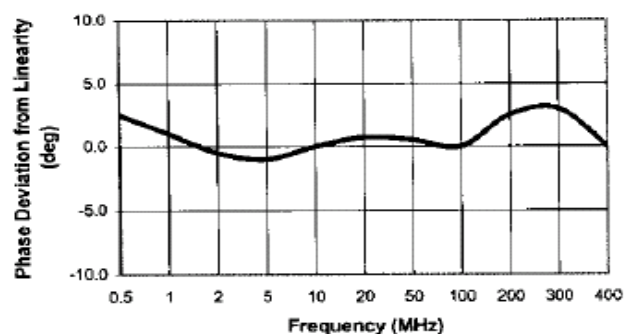
Isolation



VSWR



Phase Linearity



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