DS-117 / DS-308

3-Way Power Divider 1 - 300 MHz

Features

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

A power divider is ideally a lossless reciprocal

C-8 (DS-308)



Dimensions in () are in mm. Unless Otherwise Noted: .xxx = ±0.015 (.x = ±0.4) WEIGHT (APPROX.): 2.5 OUNCES 71 GRAMS

Pin Configuration (DS-308)



- •

Description

device which can also perform vector summation of two or more signals and thus is sometimes called a power combiner or summer.

FP-3 (DS-117)



Dimensions in () are in mm. Unless Otherwise Noted: $.xxx = \pm 0.010$ ($.xx = \pm 0.25$) $xx = \pm 0.02 (x = \pm 0.5)$ WEIGHT (APPROX.): 0.12 OUNCES 3.4 GRAMS

Pin Configuration (DS-117)

Pin No.	Function			
1, 2, 4, 5, 7, 9	Ground			
3	Input			
6	Output			
8	Output			
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			

MACOM Technology Solutions Inc. (MACOM) and its affiliates reserve the right to make changes to the product(s) or information contained herein without notice. Visit www.macom.com for additional data sheets and product information.

1



DS-117 / DS-308



3-Way Power Divider 1 - 300 MHz

Rev. V4

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

Parameter	Test Conditions	Frequency (MHz)	Units	Min.	Тур.	Max.
Insertion Loss	Less Coupling	2 - 200 1 - 300	dB	_	_	0.75 1.0
Isolation	—	2 - 200 1 - 300	dB	30 20	_	—
Amplitude Balance		1 - 300	dB	_	_	0.25
Phase Balance	—	2 - 200 1 - 300	o	_	_	3 4
VSWR	All Ports	2 - 200 1 - 300	Ratio	_	_	1.3:1 1.5:1

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

Typical Performance Curves

Insertion Loss



50

Frequency (MHz)

100

Isolation



Phase Linearity



2

MACOM Technology Solutions Inc. (MACOM) and its affiliates reserve the right to make changes to the product(s) or information contained herein without notice. Visit www.macom.com for additional data sheets and product information.

400

200 300

2

5 10 20

VSWR

1.6

1.5

1.4 VSWR

1.3

1.2

1.1 1.0

> 0.5 1