

# 2-Way 0° Power Divider 5 - 1000 MHz



MAPD-008108-C202C0

Rev. V5

## Features

- Surface Mount, Hermetically Sealed
- 2 Way, 0 Degree
- 260°C Reflow Compatible
- RoHS Compliant & Pb Free.
- RoHS version of ESSMJ-2-12-75TR
- 75  $\Omega$
- Available on Tape and Reel

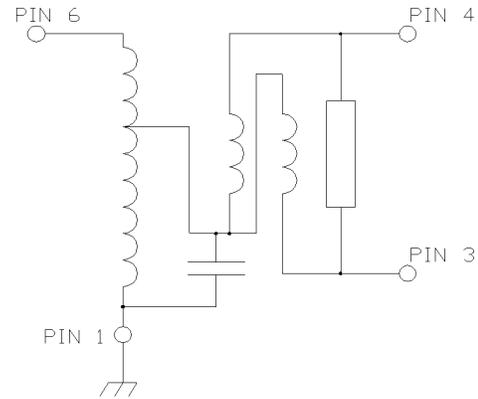
## Applications

- CATV / Broadband

## Description

The MAPD-008108-C202C0 is a 2 Way 0° Power Divider in a surface mount package.

## Functional Schematic



## Pin Configuration

Pin #	Function
1	Ground
2, 5	No Connection
3	Output Port 2
4	Output Port 1
6	Input

## Ordering Information

Part Number	Package
MAPD-008108-C202C0	900 per reel
MAPD-008108-C202TB	Customer Test Board

# 2-Way 0° Power Divider

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### Electrical Specifications: $T_A = +25^\circ\text{C}$ , $Z_0 = 75 \Omega$

Parameter	Test Conditions	Units	Min.	Typ.	Max.
Insertion Loss	5 - 500 MHz 500 - 1000 MHz	dB	—	0.4 0.5	0.6 1.2
Isolation	5 - 600 MHz 600 - 1000 MHz	dB	20 17.5	35 30	—
Amplitude Unbalance	5 - 600 MHz 600 - 1000 MHz	dB	—	—	0.2 0.5
Phase Unbalance	5 - 100 MHz 100 - 500 MHz 500 - 1000 MHz	°	—	—	1.5 3.5 4.0
Output Return Loss	5 - 40 MHz 40 - 1000 MHz	dB	12 20	20 25	—
Input Return Loss	5 - 40 MHz 40 - 500 MHz 500 - 860 MHz 860 - 1000 MHz	dB	13.5 20 17 14	20 24 21 19	—
Insertion Loss Flatness	5 - 1000 MHz	dB	—	—	0.9

### Absolute Maximum Ratings<sup>1,2</sup>

Parameter	Absolute Maximum
RF Power	1 Watt
Internal Load Dissipation	0.125 Watt
Pin Temp (10 sec.)	260°C
Storage Temperature	-55°C to +100°C
Operating Temperature	-40°C to +85°C

1. Exceeding any one or combination of these limits may cause permanent damage to this device.
2. MACOM does not recommend sustained operation near these survivability limits.

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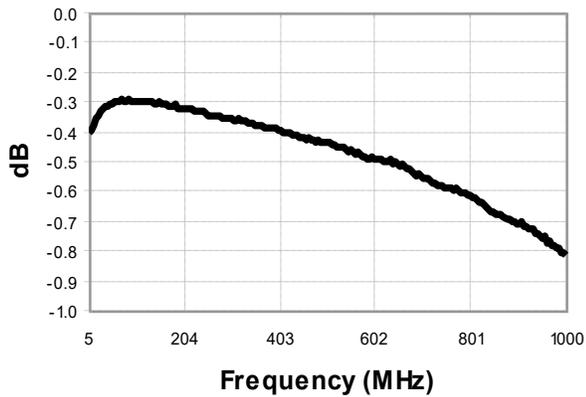


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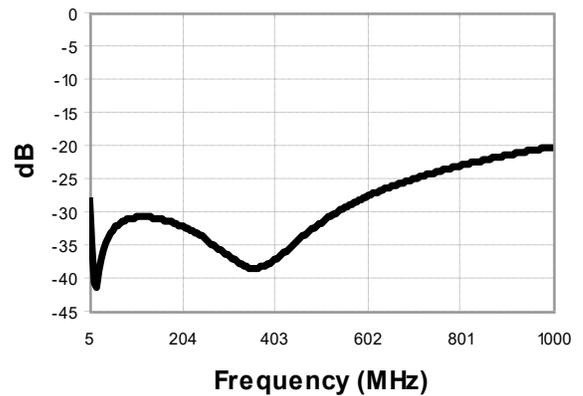
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## Typical Performance Curves

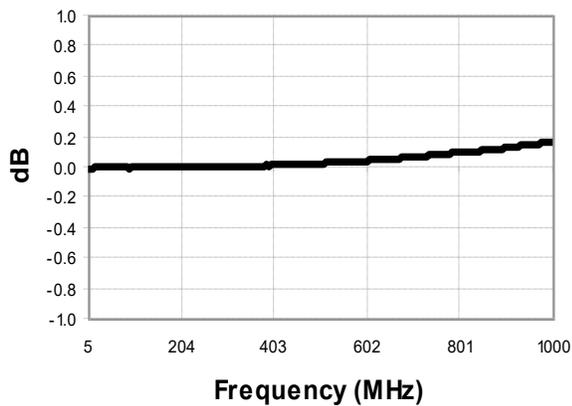
### Insertion Loss



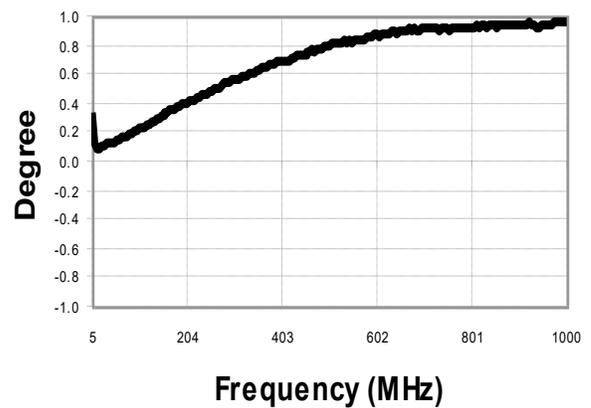
### Isolation



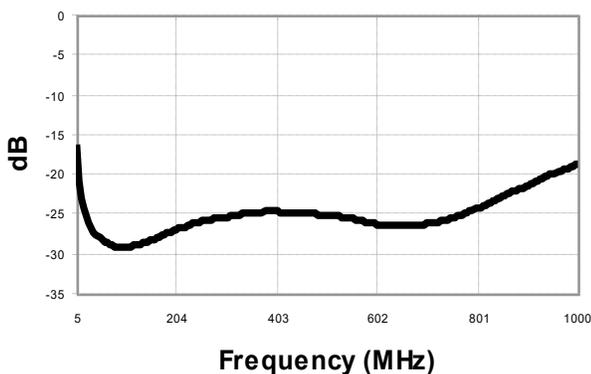
### Amplitude Balance



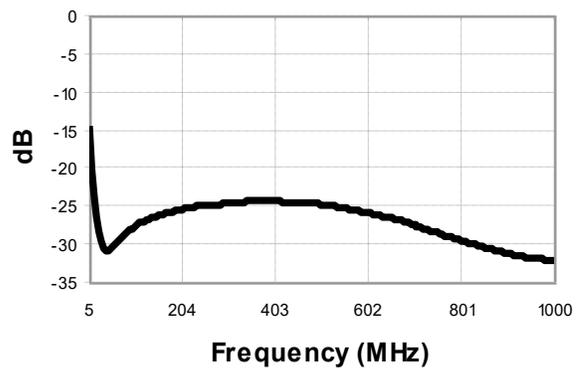
### Phase Balance



### Return Loss: Input



### Return Loss: Output



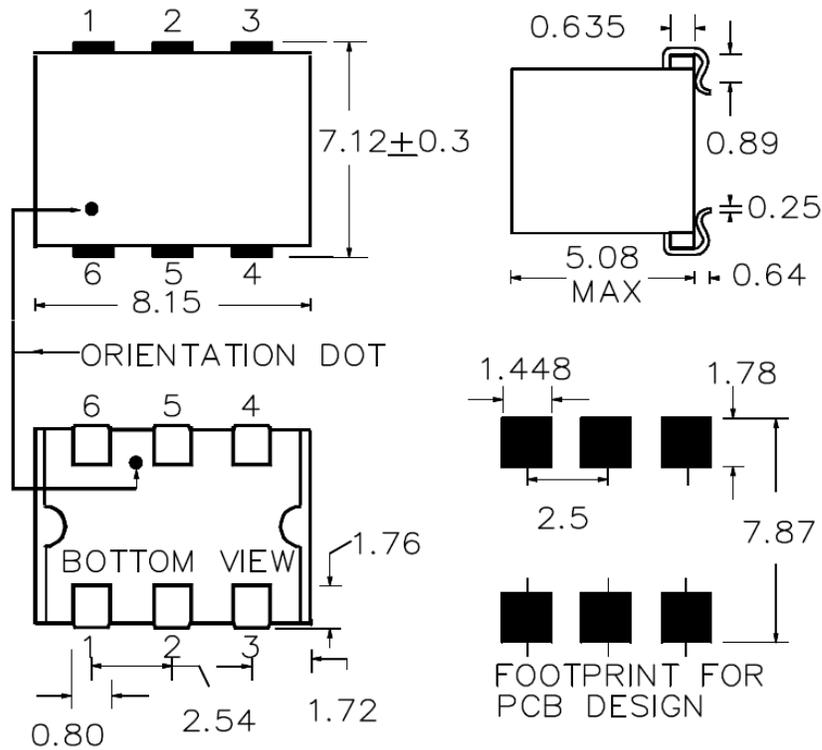
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## Case Style SM-44



1. Dimensions in mm.
2. Tolerance:  $\pm 0.254$  mm unless otherwise noted.

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