

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 Ω
- Available on Tape and Reel

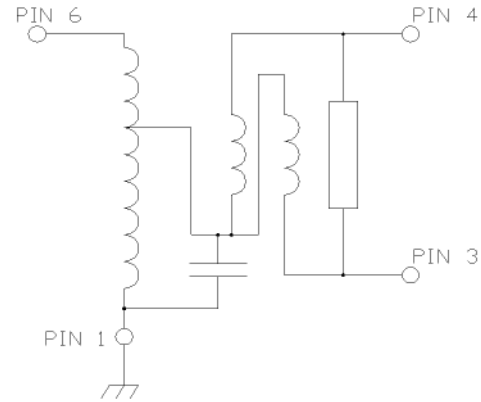
Applications

- 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

5 - 1000 MHz



MAPD-008108-C202C0

Rev. V5

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^{1,2}

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.

2-Way 0° Power Divider

5 - 1000 MHz

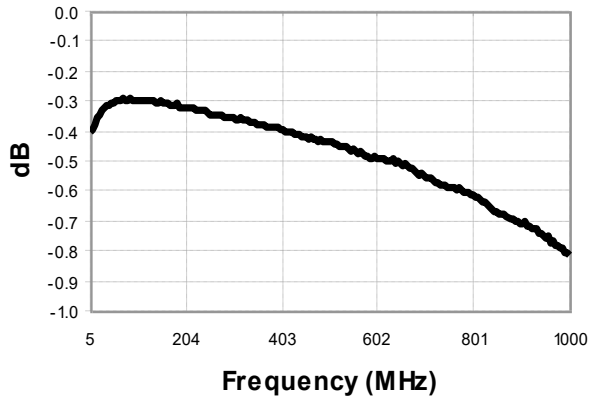


MAPD-008108-C202C0

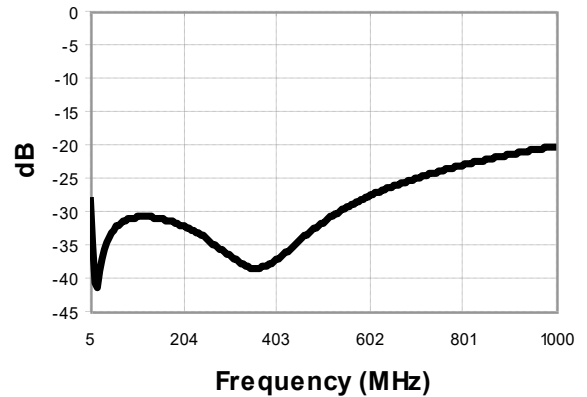
Rev. V5

Typical Performance Curves

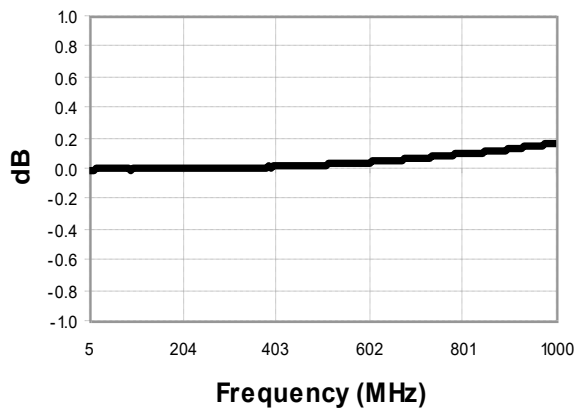
Insertion Loss



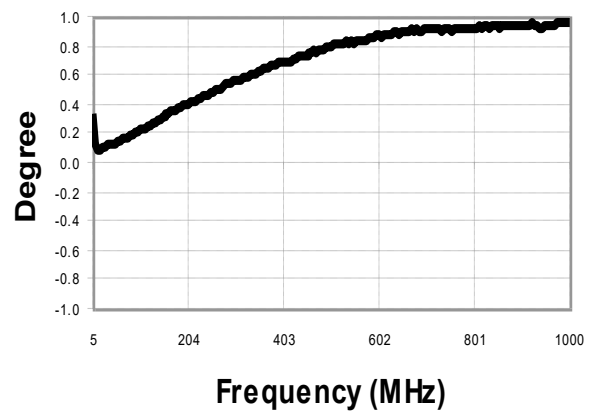
Isolation



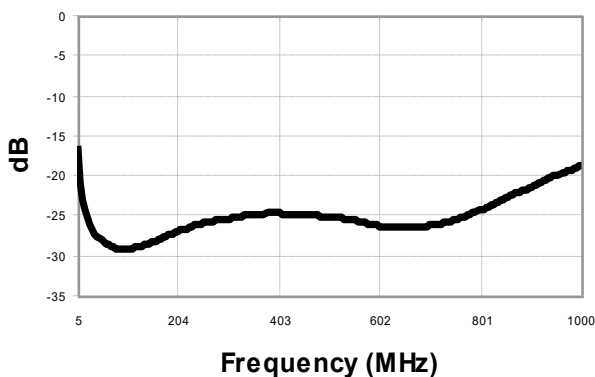
Amplitude Balance



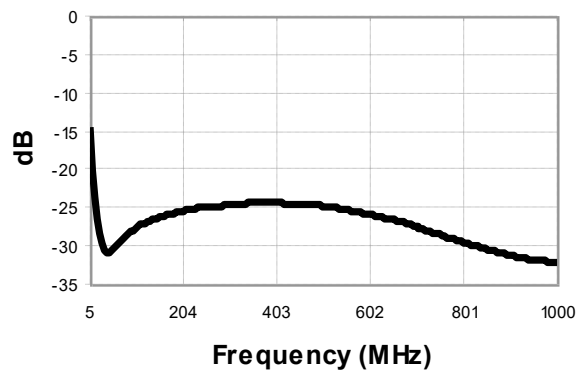
Phase Balance



Return Loss: Input



Return Loss: Output



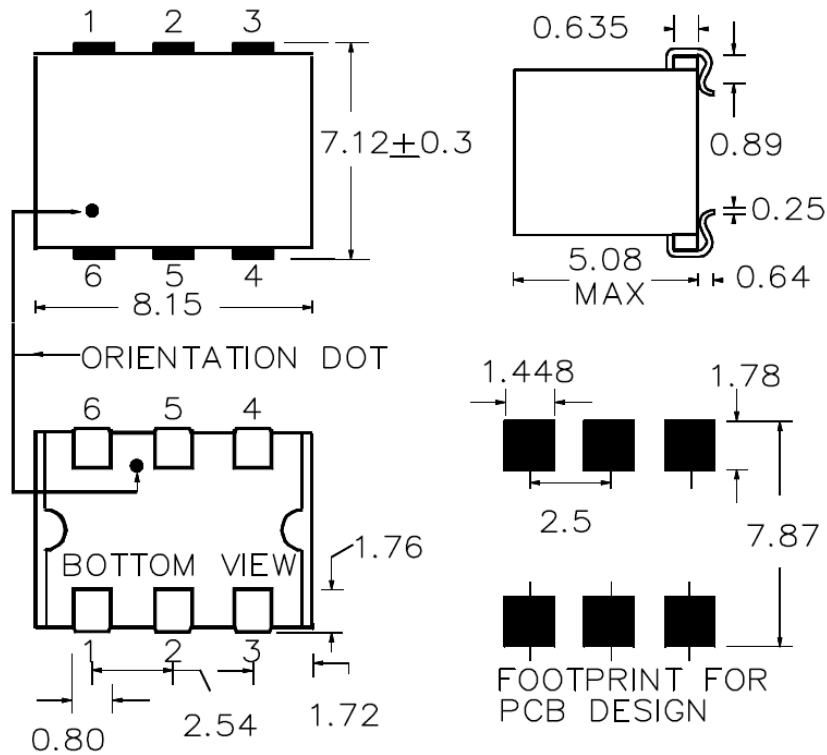
2-Way 0° Power Divider 5 - 1000 MHz



MAPD-008108-C202C0

Rev. V5

Case Style SM-44



1. Dimensions in mm.
2. Tolerance: ± 0.254 mm unless otherwise noted.

2-Way 0° Power Divider

5 - 1000 MHz



MAPD-008108-C202C0

Rev. V5

MACOM Technology Solutions Inc. ("MACOM"). All rights reserved.

These materials are provided in connection with MACOM's products as a service to its customers and may be used for informational purposes only. Except as provided in its Terms and Conditions of Sale or any separate agreement, MACOM assumes no liability or responsibility whatsoever, including for (i) errors or omissions in these materials; (ii) failure to update these materials; or (iii) conflicts or incompatibilities arising from future changes to specifications and product descriptions, which MACOM may make at any time, without notice. These materials grant no license, express or implied, to any intellectual property rights.

THESE MATERIALS ARE PROVIDED "AS IS" WITH NO WARRANTY OR LIABILITY, EXPRESS OR IMPLIED, RELATING TO SALE AND/OR USE OF MACOM PRODUCTS INCLUDING FITNESS FOR A PARTICULAR PURPOSE, MERCHANTABILITY, INFRINGEMENT OF INTELLECTUAL PROPERTY RIGHT, ACCURACY OR COMPLETENESS, OR SPECIAL, INDIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES WHICH MAY RESULT FROM USE OF THESE MATERIALS.

MACOM products are not intended for use in medical, lifesaving or life sustaining applications. MACOM customers using or selling MACOM products for use in such applications do so at their own risk and agree to fully indemnify MACOM for any damages resulting from such improper use or sale.