

## 2-Way 0° Power Divider 5 to 1000 MHz

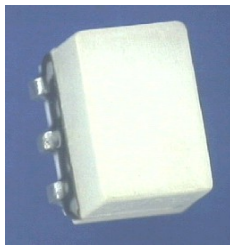
Rev. V3

### Features

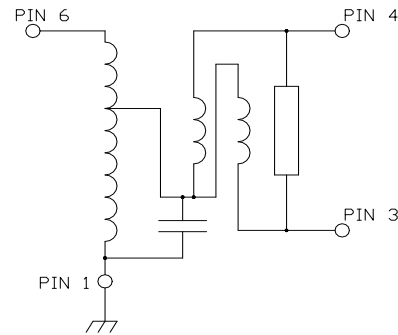
- Surface Mount, hermetically sealed
- 2 Way, 0 Degree
- 260°C Reflow Compatible
- RoHS\* Compliant
- RoHS version of ESSMJ-2-12-75TR
- 75 Ohm
- Available on Tape and Reel

### Description

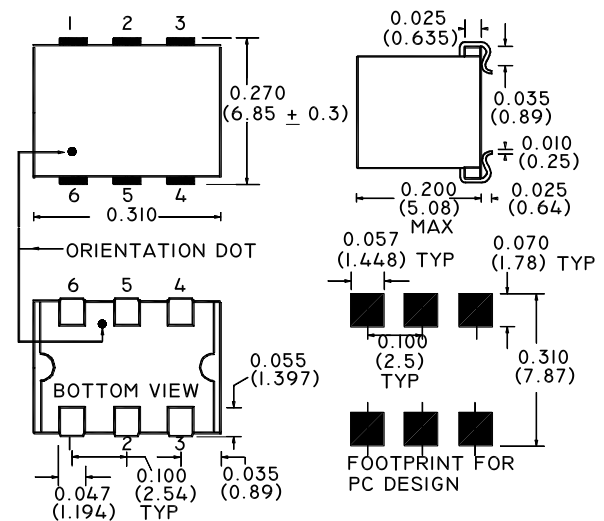
M/A-COM's MAPD-008108-C202C0 is a 2 Way 0° Power Divider in a low cost, surface mount package. Ideally suited for high volume CATV/Broadband applications.



### Schematic



### Case style: SM-44



Dimensions in inches [mm] Tolerance: .xx ± .02, .xxx ± .010

### Pin configuration

Pin No.	Function
1	Ground
2	Not Connected
3	Output Port 2
4	Output Port 1
5	Not Connected
6	Input

Note: Reference Application Note **M513** for reel size information.

\* Restrictions on Hazardous Substances, European Union Directive 2002/95/EC.

### Ordering information

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

### Electrical Specifications: $T_A = 25^\circ\text{C}$ , $Z_0 = 75\Omega$ , $P_{IN} = 0\text{dBm}$

Parameter	Frequency	Units	Minimum	Typical	Maximum
Insertion Loss	5 - 500 MHz	dB	—	0.4	0.6
	500 - 1000 MHz	dB	—	0.5	1.2
Isolation	5 - 600 MHz	dB	20	35	—
	600 - 1000 MHz	dB	17.5	30	—
Amplitude Unbalance	5 - 600 MHz	dB	—	—	0.2
	600 - 1000 MHz	dB	—	—	0.5
Phase Unbalance	5 - 100 MHz	°	—	—	1.5
	100 - 500 MHz	°	—	—	3.5
	500 - 1000 MHz	°	—	—	4.0
Output Return Loss	5 - 40 MHz	dB	12	20	—
	40 - 1000 MHz	dB	20	25	—
Input Return Loss	5 - 40 MHz	dB	13.5	20	—
	40 - 500 MHz	dB	20	24	—
	500 - 860 MHz	dB	17	21	—
	860 - 1000 MHz	dB	14	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

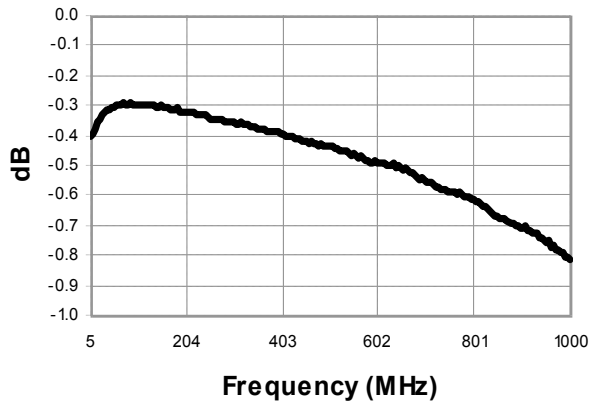
1. Exceeding any one or combination of these limits may cause permanent damage to this device.
2. M/A-COM does not recommend sustained operation near these survivability limits.

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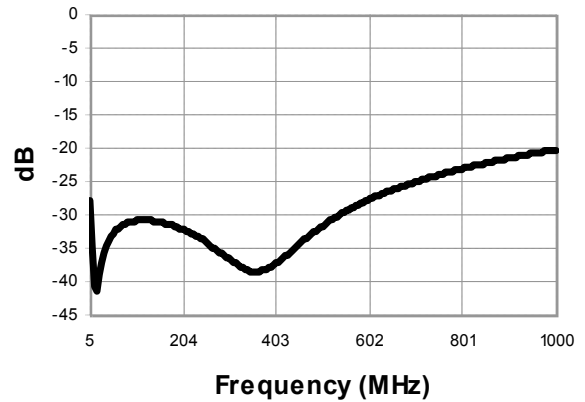
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Typical Performance Curves:  $T_A = 25^\circ\text{C}$ ,  $Z_0 = 75\Omega$ ,  $P_{IN} = 0\text{dBm}$

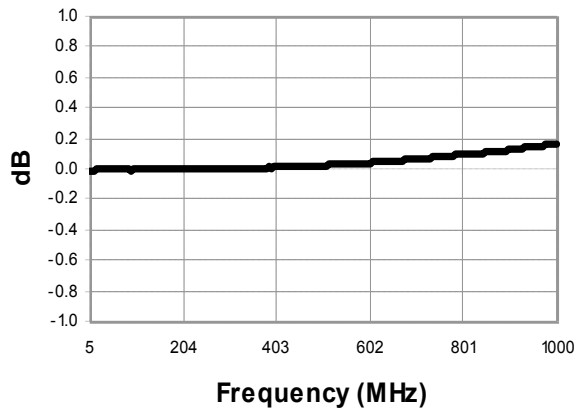
Insertion Loss



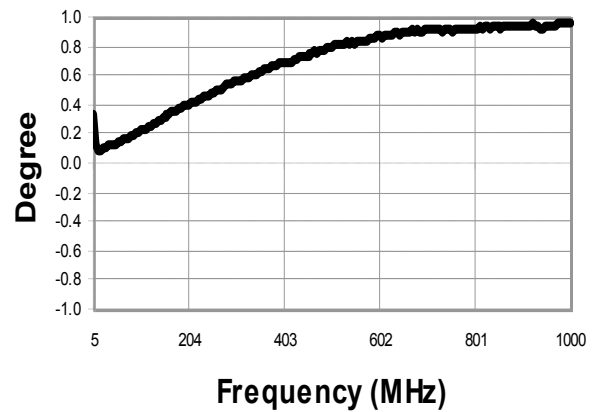
Isolation



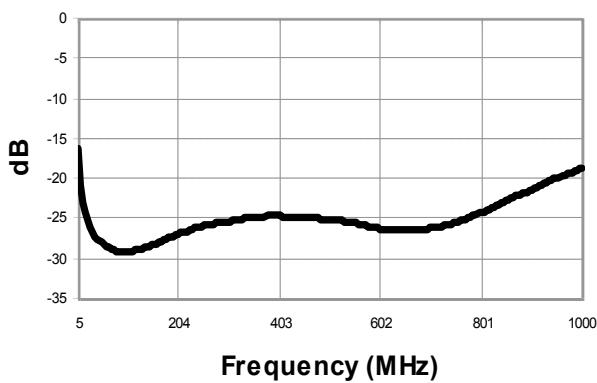
Amplitude Balance



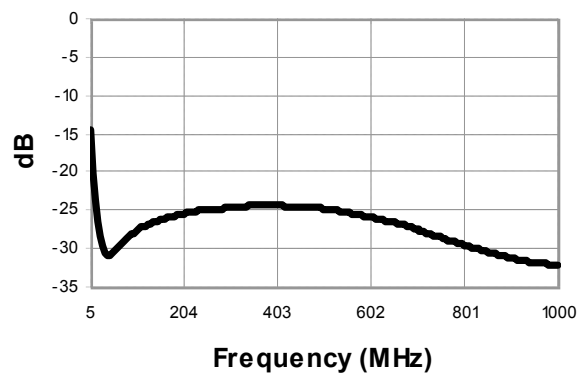
Phase Balance



Return Loss: Input



Return Loss: Output



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