

# MAPD-010274-C209C0



2 Way 0° Power Divider  
5 to 1000 MHz

Rev. V3

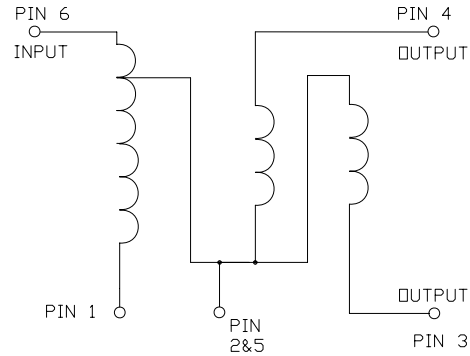
## Features

- Surface Mount
- 2 way 0 degree
- 260°C Reflow Compatible
- RoHS\* Compliant, lead free
- Available on Tape and Reel.

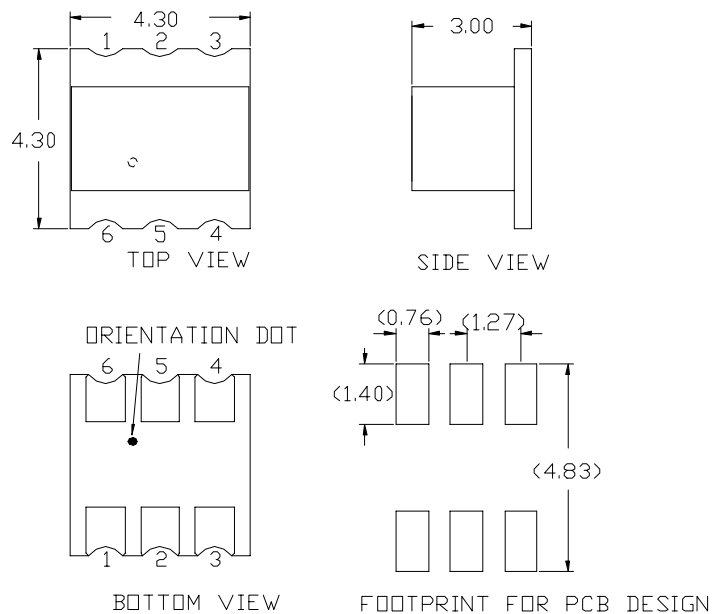
## Description

M/A-COM Technology Solutions MAPD-010274-C209C0 is a 2 way 0 degree RF power divider in a low cost, surface mount package. Ideally suited for high volume CATV/SAT applications.

## Schematic



## Component dimensions:



## Pin Configuration

Pin No.	Function
1	Ground
2	External 0.5pF Capacitor
3	Output Port 2
4	Output Port 1
5	External 0.5pF Capacitor
6	Input

Dimensions in mm Tolerance: .xx ± .1, .xxx ± .010, unless otherwise stated

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

**ADVANCED:** Data Sheets contain information regarding a product MA-COM Technical Solutions is considering for development. Performance is based on target specifications, simulated results, and/or prototype measurements. Commitment to develop is not guaranteed.

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

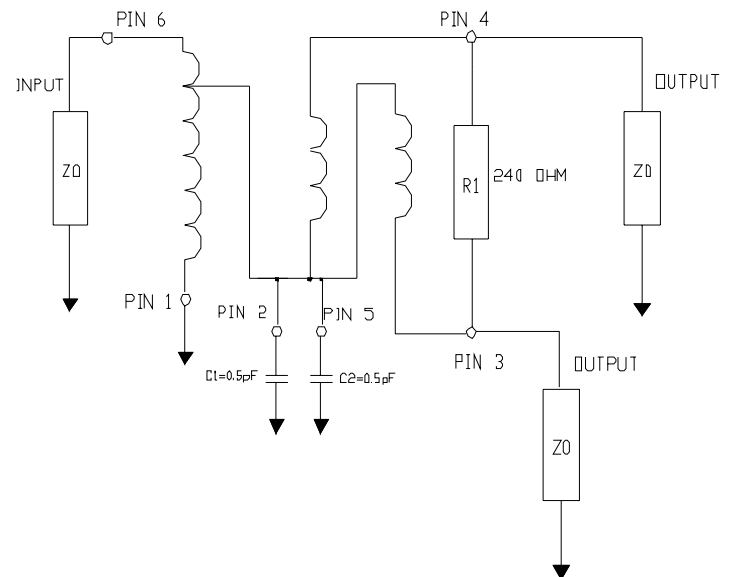
Parameter	Test Conditions	Units	Min	Typ	Max
Insertion Loss (Above 3dB)	5 - 50 MHz	dB	-	0.15	1.4
	50 - 500 MHz	dB	-	0.25	0.9
	500 - 1000 MHz	dB	-	0.60	1.3
Amplitude Balance	5 - 50 MHz	dB	-	0.18	$\pm 1.2$
	50 - 500 MHz	dB	-	0.20	$\pm 0.6$
	500 - 1000 MHz	dB	-	0.30	$\pm 0.5$
Phase Balance	5 - 50 MHz	$^\circ$	-	0.01	$\pm 6$
	50 - 500 MHz	$^\circ$	-	0.25	$\pm 4$
	500 - 1000 MHz	$^\circ$	-	0.40	$\pm 3$
Input Return Loss	5 - 50 MHz	dB	15	40	-
	50 - 500 MHz	dB	15	38	-
	500 - 1000 MHz	dB	15	30	-
Output Return Loss	5 - 50 MHz	dB	15	29	-
	50 - 500 MHz	dB	15	33	-
	500 - 1000 MHz	dB	15	20	-
Isolation (between outputs)	5 - 50 MHz	dB	14	27	-
	50 - 500MHz	dB	19	26	-
	500 - 1000 MHz	dB	16	19	-

## Recommended Maximum Ratings

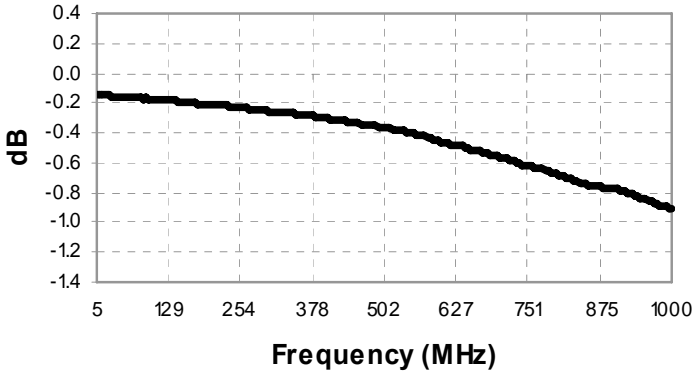
Parameter	Value
Input power	1W
Internal Load Dissipation	0.125W
Operating Temperature	$-40^\circ\text{C}$ to $+85^\circ\text{C}$
Storage Temperature	$-55^\circ\text{C}$ to $+100^\circ\text{C}$

• Full temperature plots are available on request

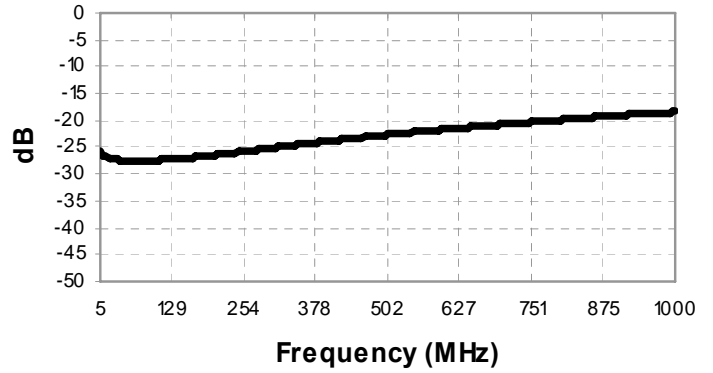
## Application Circuit



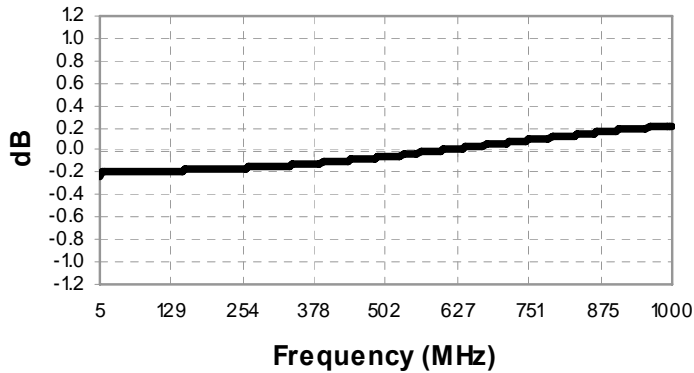
### Insertion Loss:



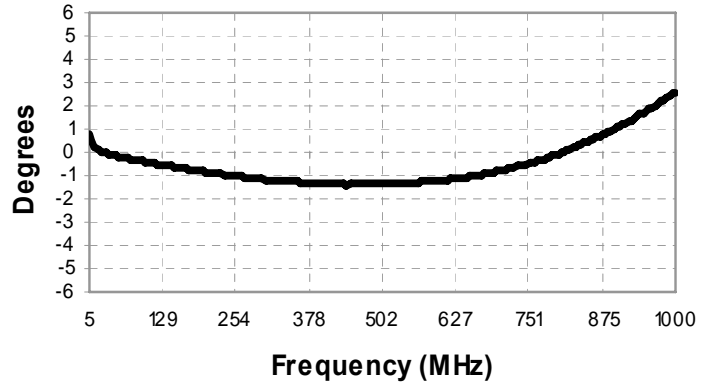
### Isolation:



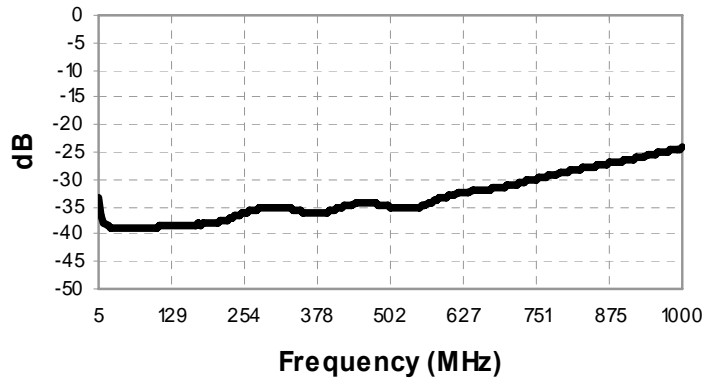
### Amplitude Balance:



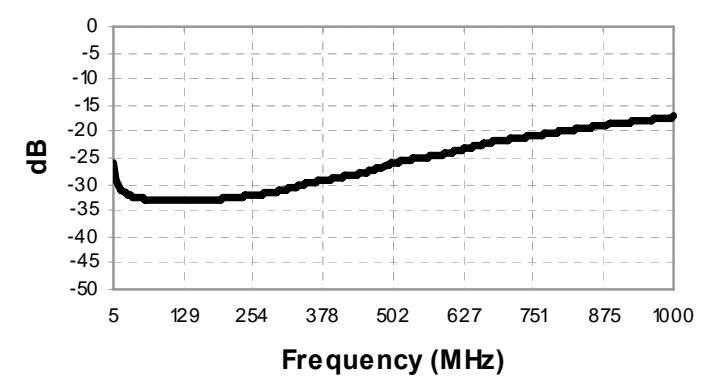
### Phase Balance:



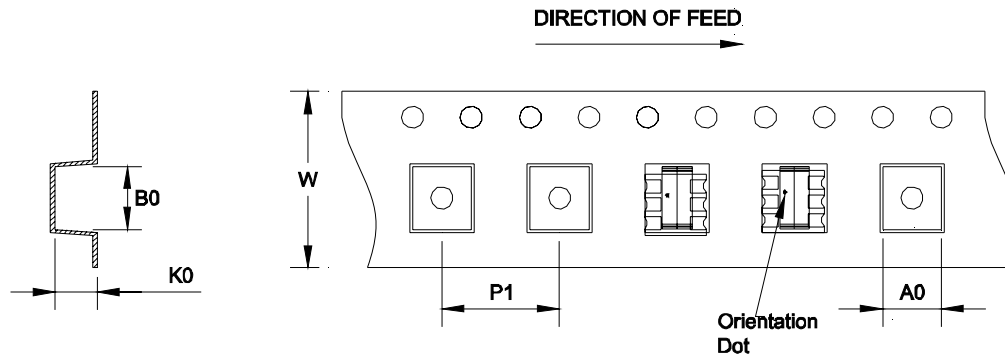
### Return Loss: Input



### Return Loss: Output



## Tape & Reel Information



Item	Dimension
Ao	4.60mm +/- 0.1mm
Bo	4.60mm +/- 0.1mm
Ko	3.30mm +/- 0.1mm
W	12.00mm +/- 0.3mm
P1	8.00mm +/- 0.1mm

## Ordering Information

Part number	Description
MAPD-010274-C209C0	2000 piece reel
MAPD-010274-C209TB	Customer Test Board