

MAPD-010274-C209C0

2 Way 0° Power Divider
5 to 1000 MHz

Rev. V2

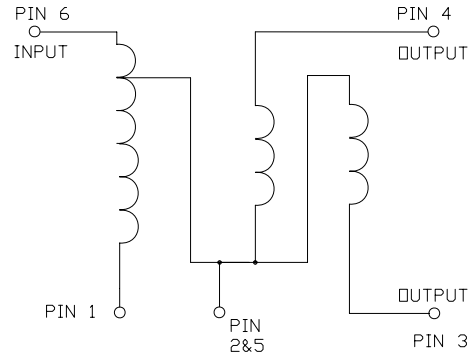
Features

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

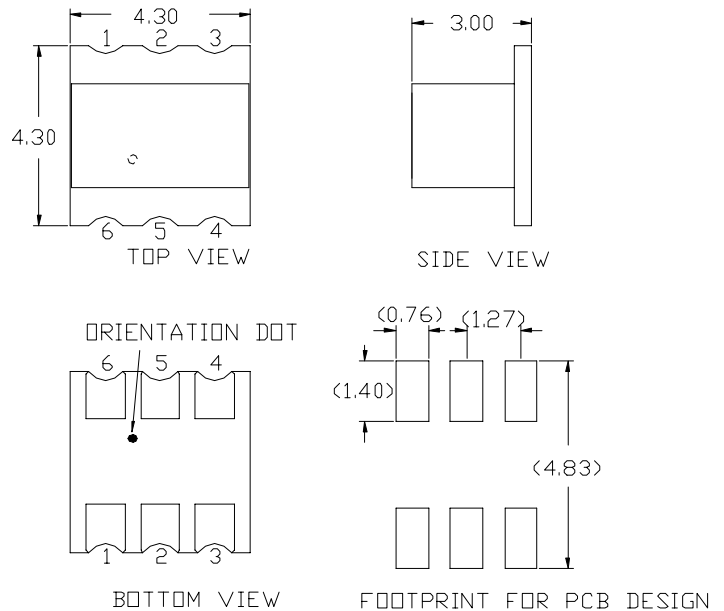
Description

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.

1

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.

PRELIMINARY: Data Sheets contain information regarding a product MA-COM Technical Solutions has under development. Performance is based on engineering tests. Specifications are typical. Mechanical outline has been fixed. Engineering samples and/or test data may be available. Commitment to produce in volume is not guaranteed.

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Visit www.macomtech.com for additional data sheets and product information.

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

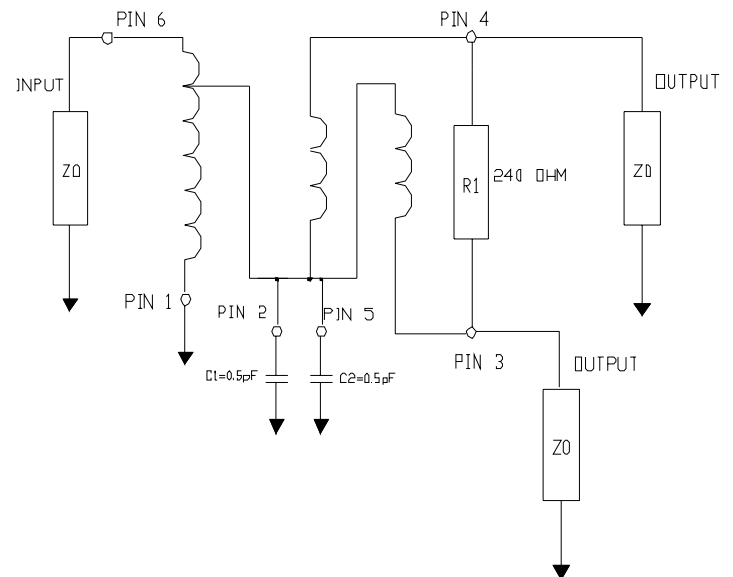
Parameter	Test Conditions	Units	Min	Typ	Max
Insertion Loss (Above 3dB)	5 - 50 MHz	dB	-	0.15	1.4
	50 - 500 MHz	dB	-	0.25	0.9
	500 - 1000 MHz	dB	-	0.60	1.3
Amplitude Balance	5 - 50 MHz	dB	-	0.18	± 1.2
	50 - 500 MHz	dB	-	0.20	± 0.6
	500 - 1000 MHz	dB	-	0.30	± 0.5
Phase Balance	5 - 50 MHz	$^\circ$	-	0.01	± 6
	50 - 500 MHz	$^\circ$	-	0.25	± 4
	500 - 1000 MHz	$^\circ$	-	0.40	± 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

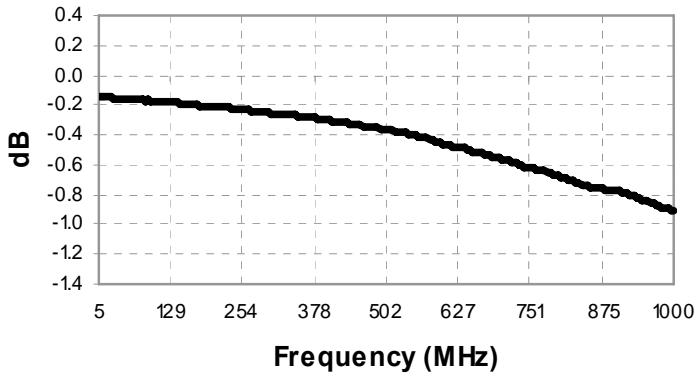
Parameter	Value
Input power	1W
Internal Load Dissipation	0.125W
Operating Temperature	-40°C to $+85^\circ\text{C}$
Storage Temperature	-55°C to $+100^\circ\text{C}$

• Full temperature plots are available on request

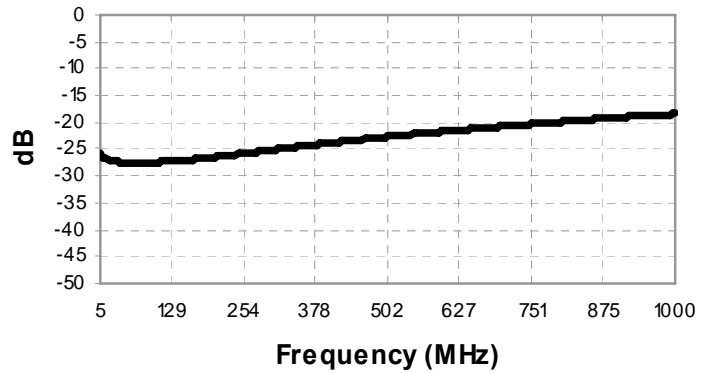
Application Circuit



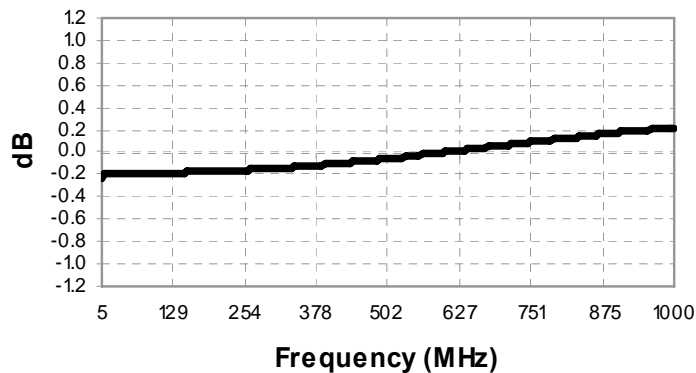
Insertion Loss:



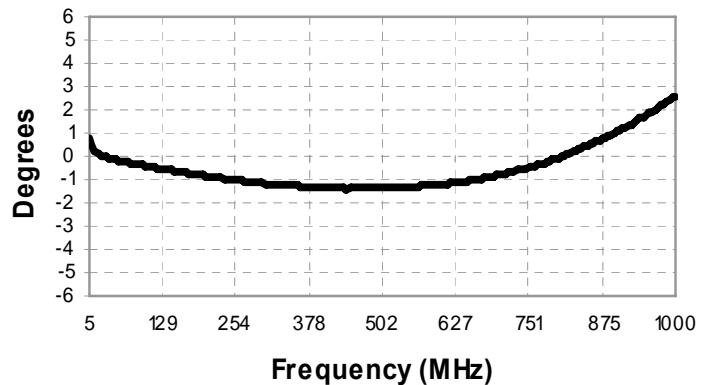
Isolation:



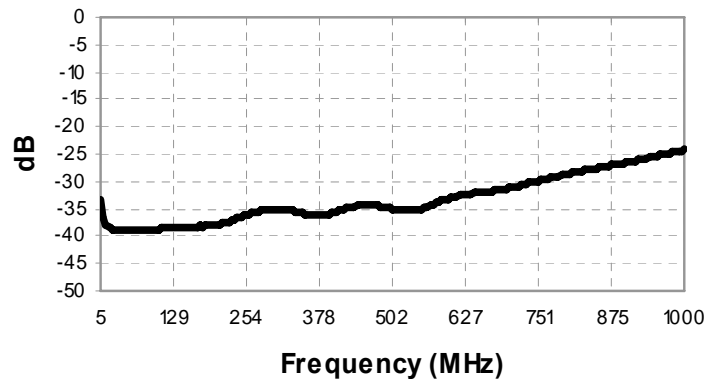
Amplitude Balance:



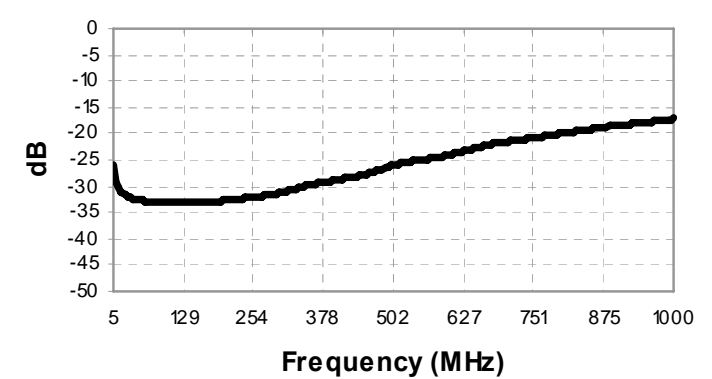
Phase Balance:



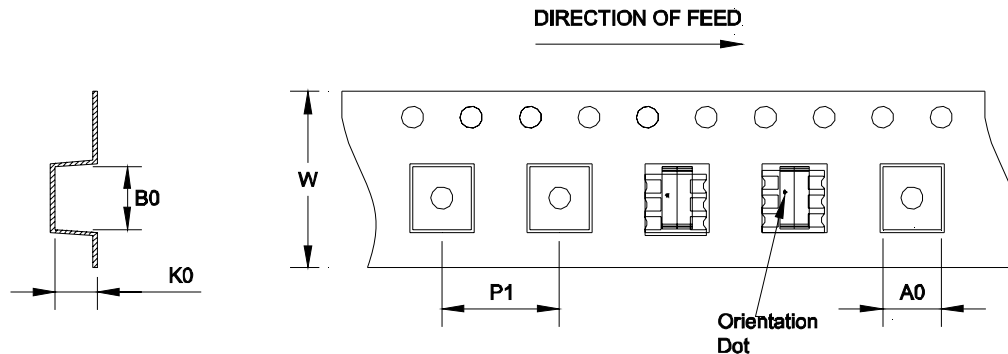
Return Loss: Input



Return Loss: Output



Tape & Reel Information



Item	Dimension
Ao	4.55mm +/- 0.1mm
Bo	4.75mm +/- 0.1mm
Ko	3.10mm +/- 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