

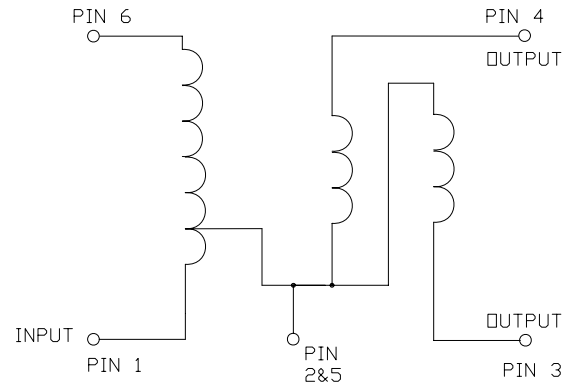
Features

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

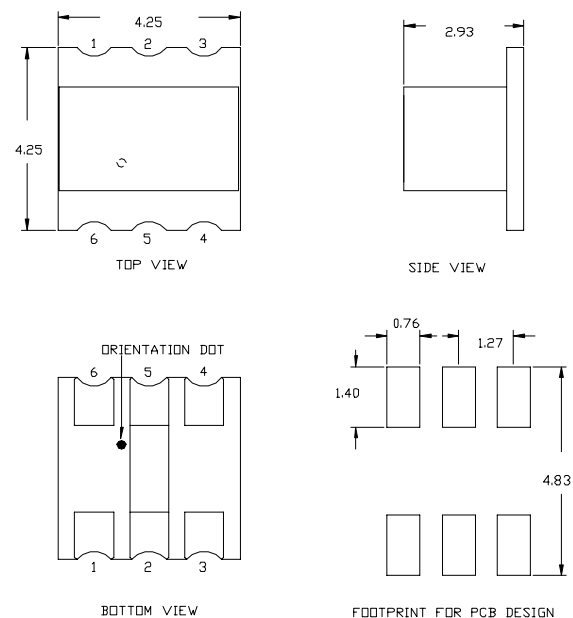
Description

M/A-COM Technology Solutions MAPD-010038-C209C0 is a 2 way 0 degree RF power divider in a low cost, surface mount package. Ideally suited for high volume CATV/VSAT applications.

Schematic



Case Style:



Pin Configuration

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

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

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

2 Way 0° Power Divider 5 to 1000 MHz

Rev. V1

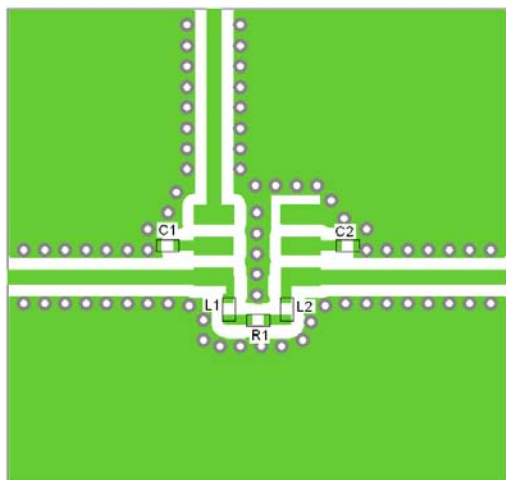
Electrical Specifications: $T_A = 25^\circ\text{C}$, 0dBm, $Z_0 = 75\Omega$, $P_{in} = 0\text{dBm}$

Parameter	Test Conditions	Units	Min	Typ	Max
Insertion Loss (Above 3dB)	5 - 50 MHz	dB	-	0.53	0.7
	50 - 500MHz	dB	-	0.55	0.8
	500 - 1000MHz	dB	-	0.65	1.0
Amplitude Balance	5 - 1000 MHz	dB	-	0.3	± 0.6
Phase Balance	5 - 1000 MHz	°	-	0.3	± 4.0
Input Return Loss	5 - 1000 MHz	dB	20	30	-
Output Return Loss	5 - 50 MHz	dB	17	23	-
	50 - 1000MHz	dB	20	27	-
Isolation (between outputs)	5 - 50 MHz	dB	24	40	-
	50 - 1000MHz	dB	30	38	-

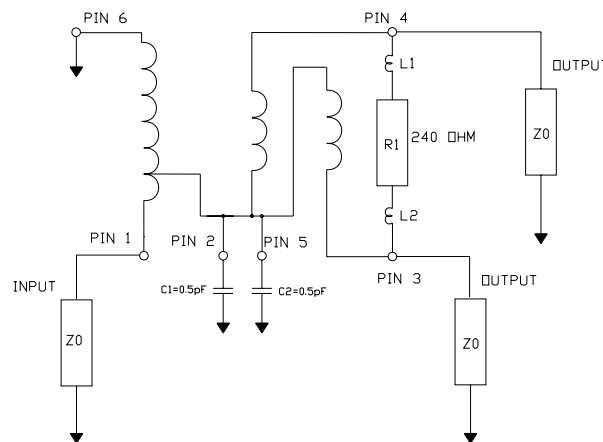
Recommended Maximum Ratings

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

Recommended PCB Configuration



Application Circuit



Ref	Description	P/N	Vendor
R1	RES,0402	240Ω	ROHM
L1	IND,0402,TBD	8.2nH	COILCRAFT
L2	IND,0402,TBD	8.2nH	COILCRAFT
C1	CAP,0402	0.5pF	MURATA
C2	CAP,0402	0.5pF	MURATA

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.

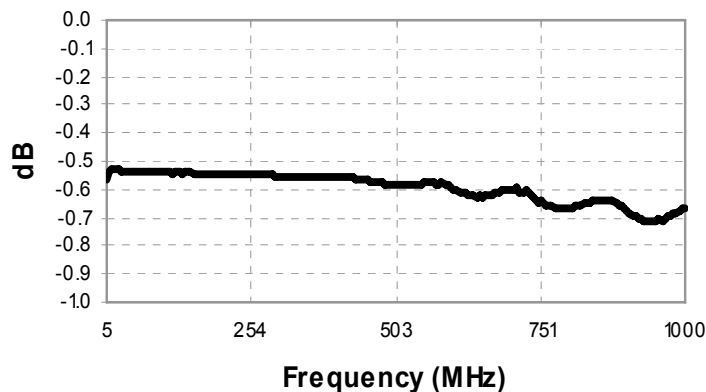
PRELIMINARY: Data Sheets contain information regarding a product MA-COM Technical Solutions has under development. Performance is based on engineering tests. Specifications are typical. Mechanical outline has been fixed. Engineering samples and/or test data may be available. Commitment to produce in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

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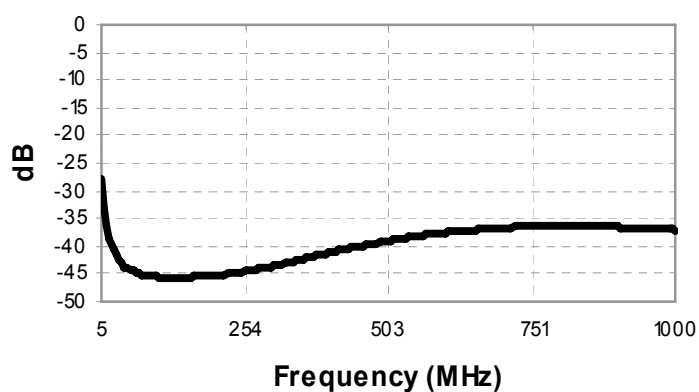
Visit www.macomtech.com for additional data sheets and product information.

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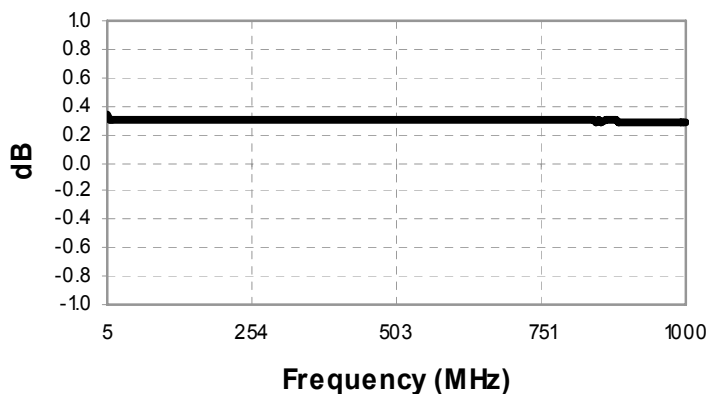
Insertion Loss:



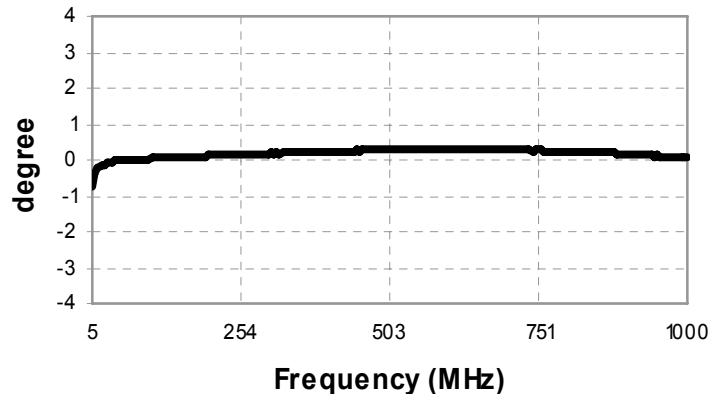
Isolation:



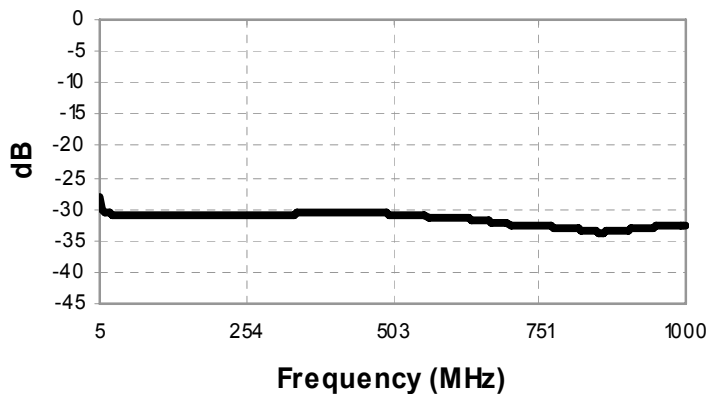
Amplitude Balance:



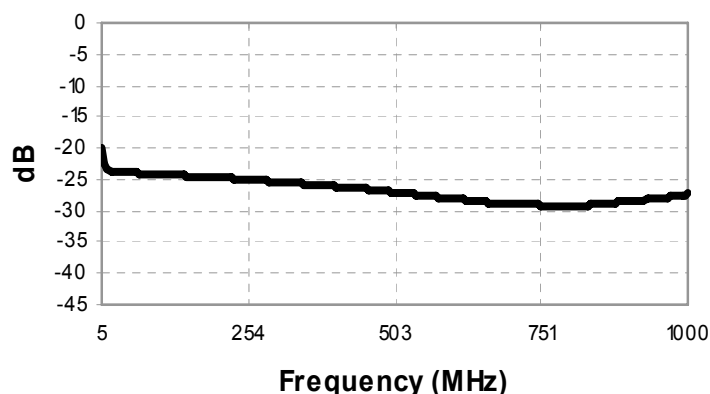
Phase Balance:



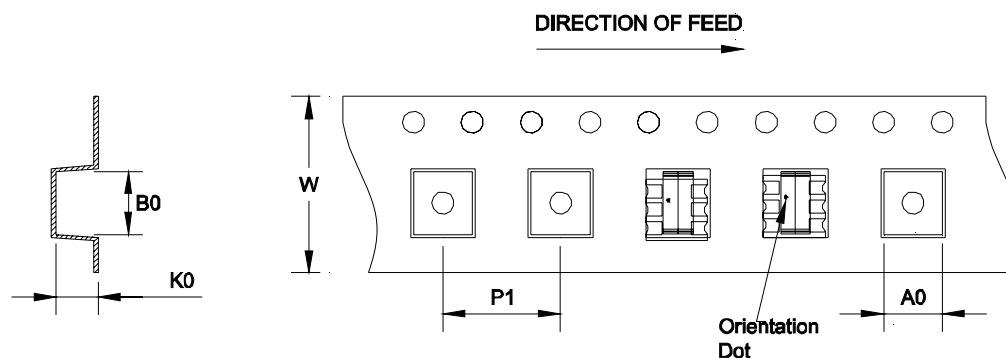
Return Loss: Input



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
MABA-010038-C209C0	2000 piece reel
MABA-010038-C209TB	Customer Test Board