

2 Way 0° Power Divider 5 to 1000 MHz

Rev. V1

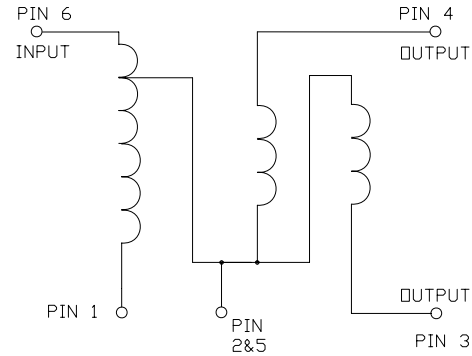
Features

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

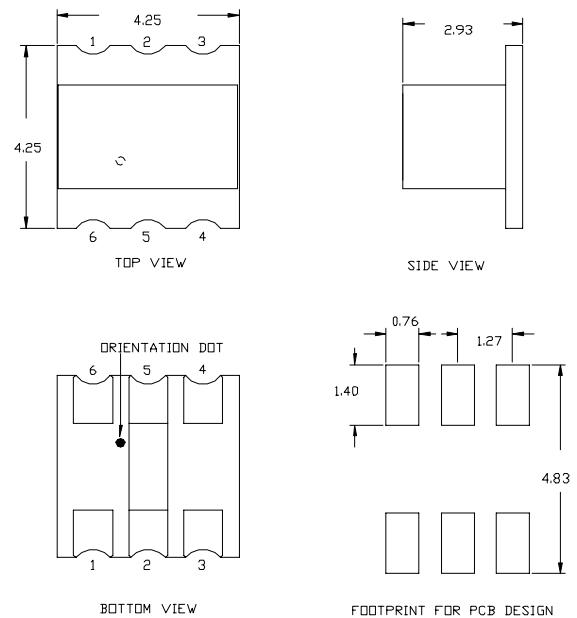
Description

M/A-COM Technology Solutions MAPD-009918-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	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.

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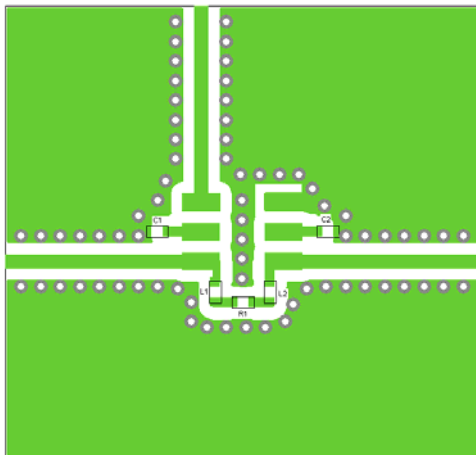
Electrical Specifications: $T_A = 25^\circ\text{C}$, 0dBm, $Z_0 = 75\Omega$, $P_{in} = 0\text{dBm}$

Parameter	Test Conditions	Units	Min	Typ	Max
Insertion Loss (Above 3dB)	5 - 50 MHz	dB	-	0.53	0.7
	50 - 500 MHz	dB	-	0.57	0.8
	500 - 1000 MHz	dB	-	0.72	1.0
Amplitude Balance	5 - 1000 MHz	dB	-	0.3	± 0.6
Phase Balance	5 - 1000 MHz	°	-	0.9	± 4.0
Input Return Loss	5 - 1000 MHz	dB	20	29	- - -
Output Return Loss	5 - 50 MHz	dB	18	23	-
	50 - 1000 MHz	dB	20	29	- -
Isolation (between outputs)	5 - 50 MHz	dB	26	40	-
	50 - 1000MHz	dB	30	38	-

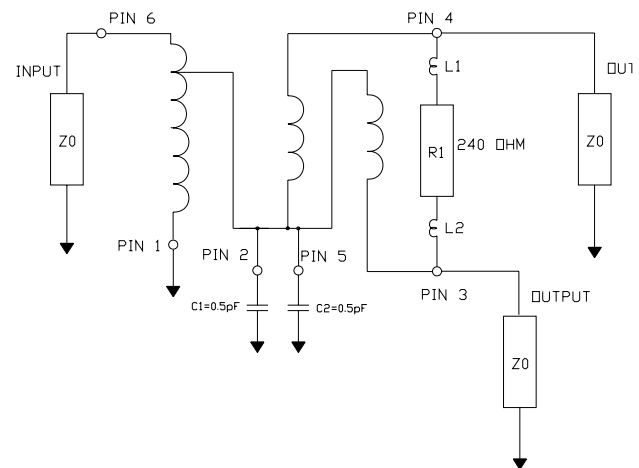
Recommended Maximum Ratings

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

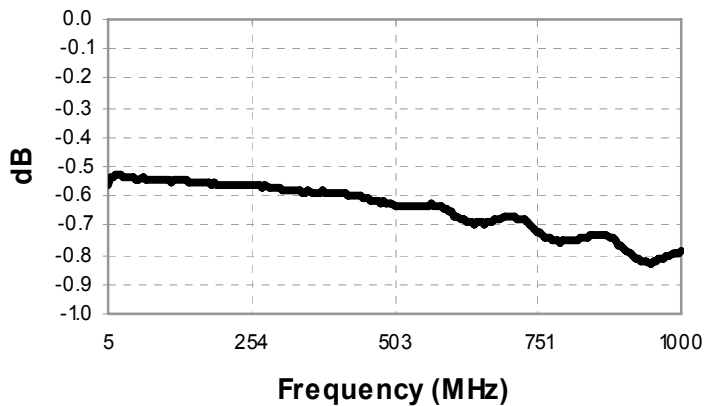


REF	DESCRIPTION	P/N	VENDOR
R1	RES,0402	240Ω	ROHM
L1	IND,0402	8.2nH	COILCRAFT
L2	IND,0402	8.2nH	COILCRAFT
C1	CAP,0402	0.5pF	MURATA
C2	CAP,0402	0.5pF	MURATA

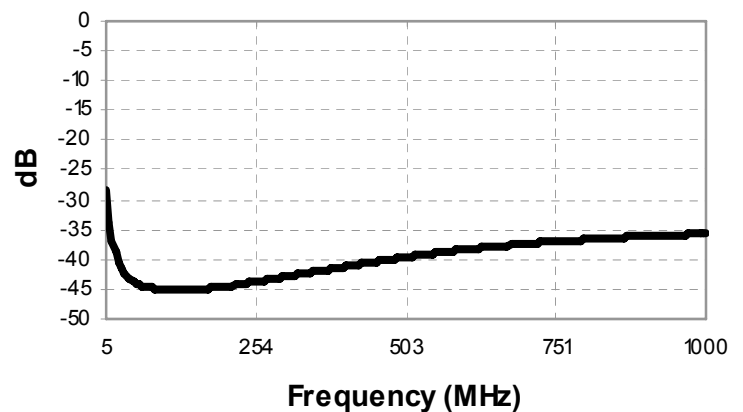
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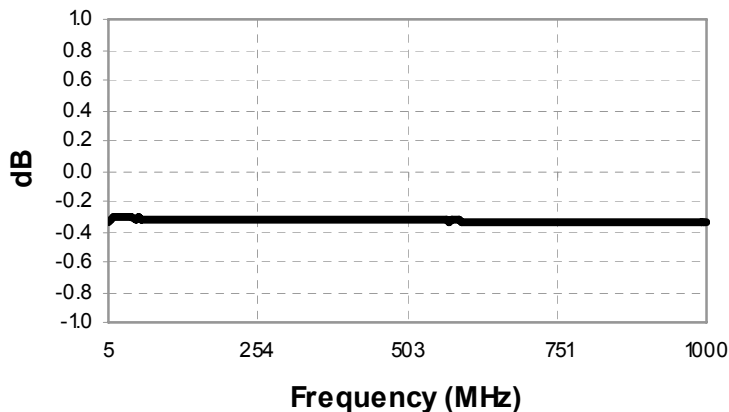
Insertion Loss:



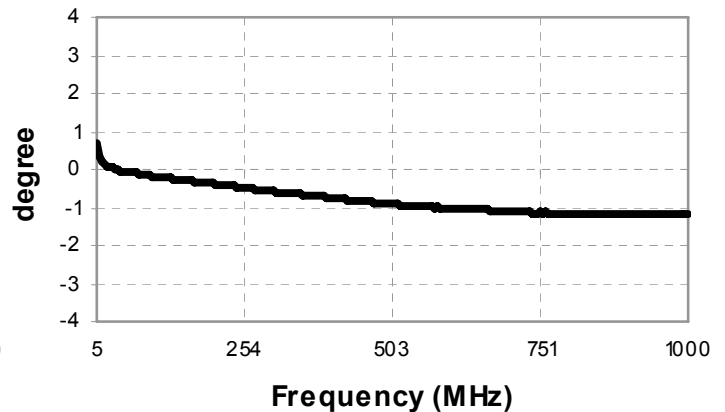
Isolation:



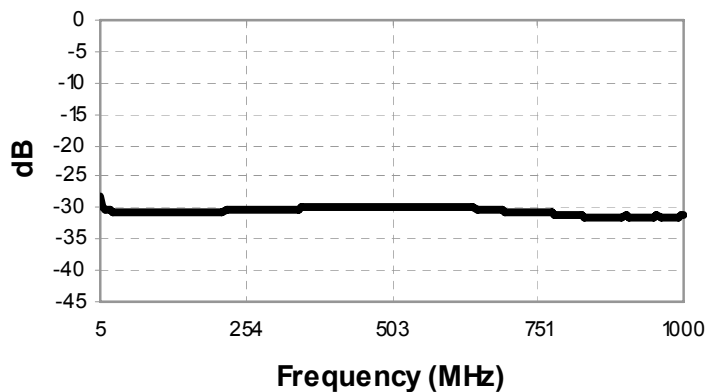
Amplitude Balance:



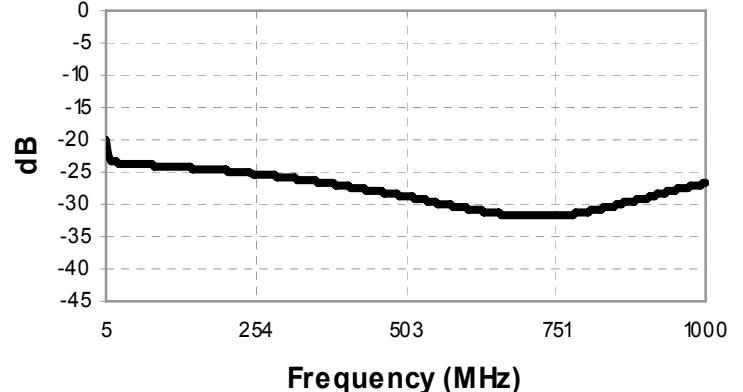
Phase Balance:



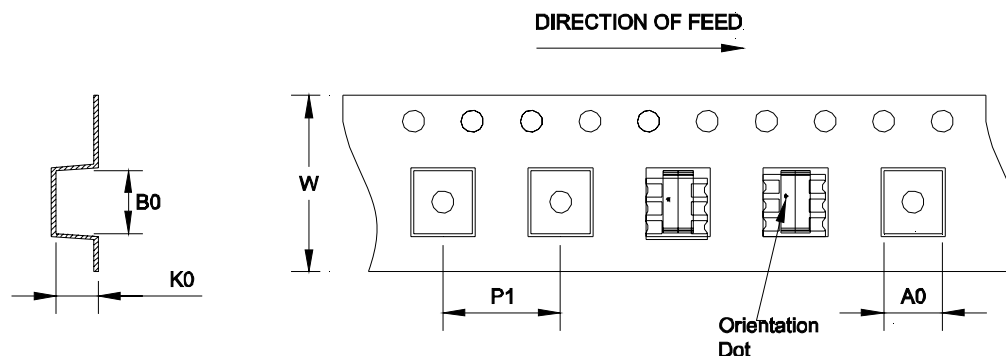
Return Loss: Input



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-009918-C209C0	2000 piece reel
MABA-009918-C209TB	Customer Test Board