

## 2 Way 0° Power Divider 5 to 1218 MHz

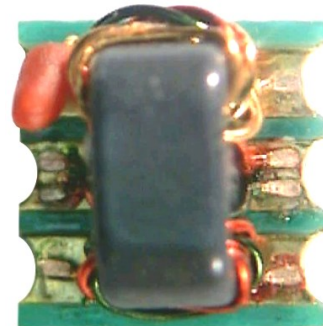
Rev. V5

### Features

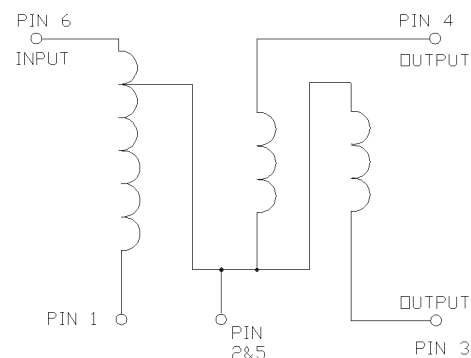
- Surface Mount
- 2 way 0 degree
- 260°C Reflow Compatible
- RoHS Compliant, lead free
- Available on Tape and Reel.

### 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/VSAT applications.



### Schematic



### Ordering Information

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

### 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

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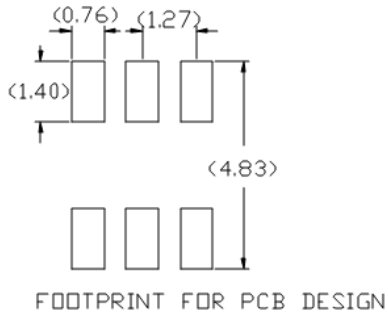
Electrical Specifications:  $T_A = 25^\circ\text{C}$ ,  $0\text{dBm}$ ,  $Z_0 = 75\Omega$ ,  $P_{in} = 0\text{dBm}$

Parameter	Test Conditions	Units	Min	Typ	Max
Insertion Loss 1 (Pin6-Pin4)	5 - 500 MHz	dB	-	0.15	0.3
	500 - 1000 MHz	dB	-	0.25	0.7
	1000 - 1218MHz	dB	-	0.65	0.9
Insertion Loss 2 (Pin6-Pin3)	5 - 500 MHz	dB	-	0.45	0.6
	500 - 1000 MHz	dB	-	0.65	1.1
	1000 - 1218MHz	dB	-	1.1	1.5
Amplitude Balance	5 - 500 MHz	dB	-	0.20	$\pm 0.4$
	500 - 1000 MHz	dB	-	0.28	$\pm 0.5$
	1000 - 1218 MHz	dB	-	0.35	$\pm 0.7$
Phase Balance	5 - 500 MHz	°	-	0.5	$\pm 2$
	500 - 1000 MHz	°	-	0.65	$\pm 3$
	1000 - 1218 MHz	°	-	0.55	$\pm 4$
Input Return Loss	5 - 500 MHz	dB	20	40	-
	500 - 1000 MHz	dB	19	30	-
	1000 - 1218 MHz	dB	15	14	-
Output Return Loss 1 (Pin1-Pin4)	5 - 500 MHz	dB	20	29	-
	500 - 1000 MHz	dB	18	33	-
	1000 - 1218 MHz	dB	15	19	-
Output Return Loss 2 (Pin2-Pin3)	5 - 500 MHz	dB	20	33	-
	500 - 1000 MHz	dB	16	21	-
	1000 - 1218 MHz	dB	13	16	-
Isolation (between outputs)	5 - 500 MHz	dB	20	24	-
	500 - 1000 MHz	dB	16	20	-
	1000 - 1218 MHz	dB	15	18	-

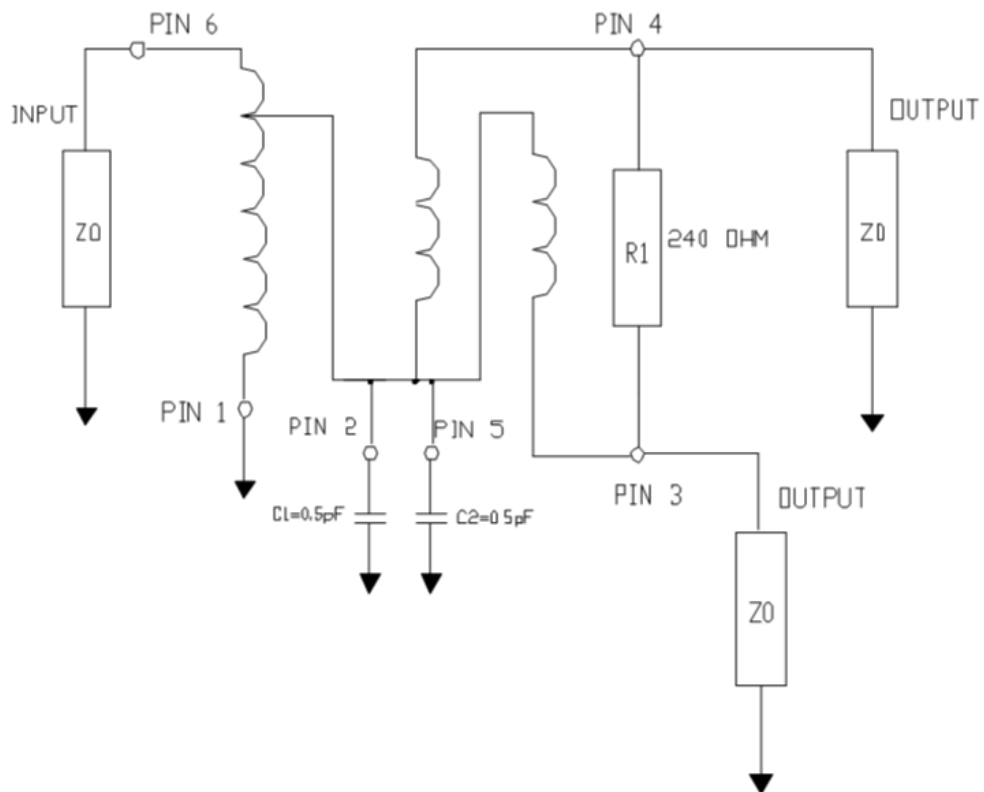
## Recommended Maximum Ratings

Parameter	Value
Input power	1W
Internal Load Dissipation	0.125W
Operating Temperature	-40°C to +85°C
Storage Temperature	-55°C to +100°C

## PCB Layout



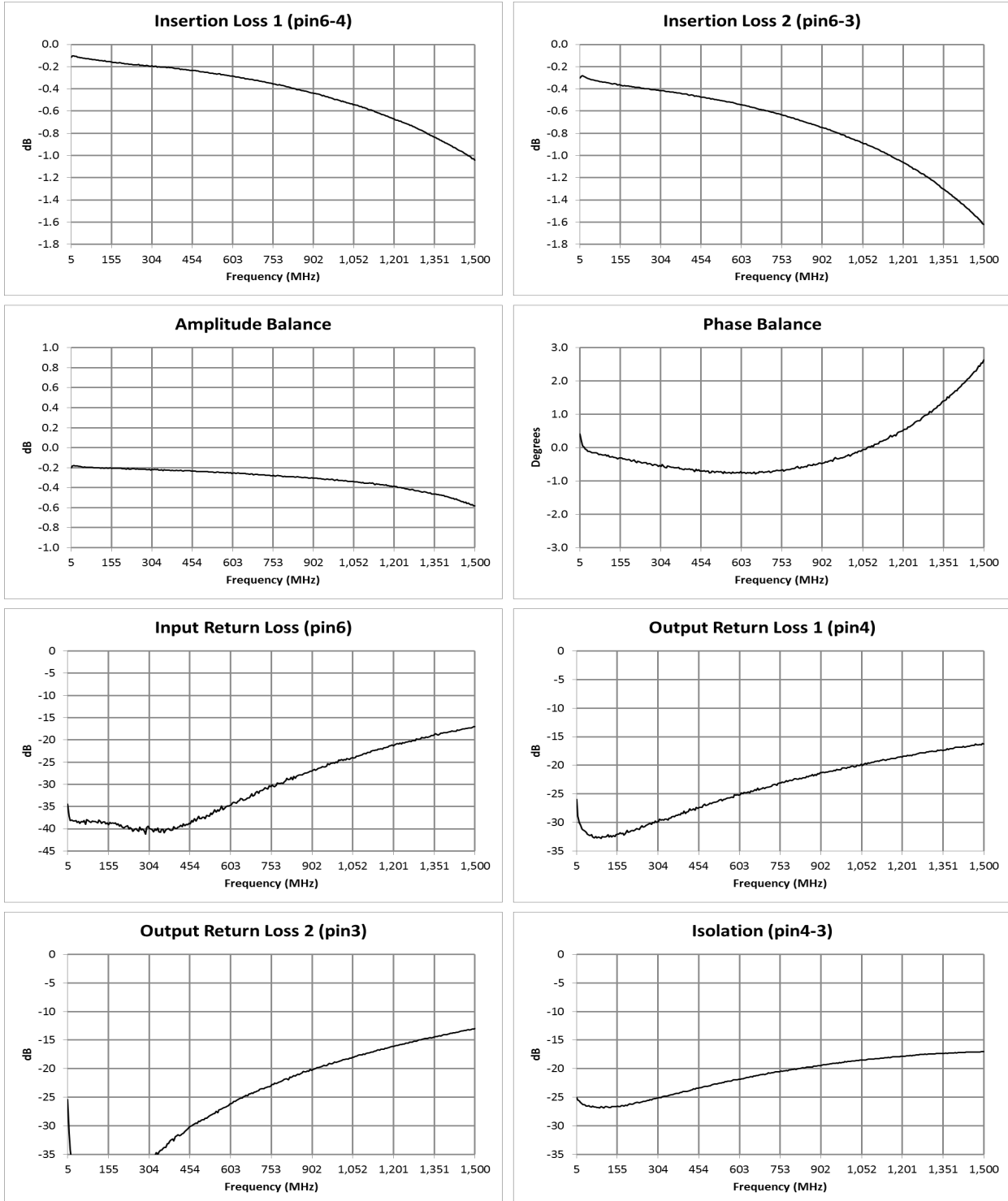
## Application Schematic



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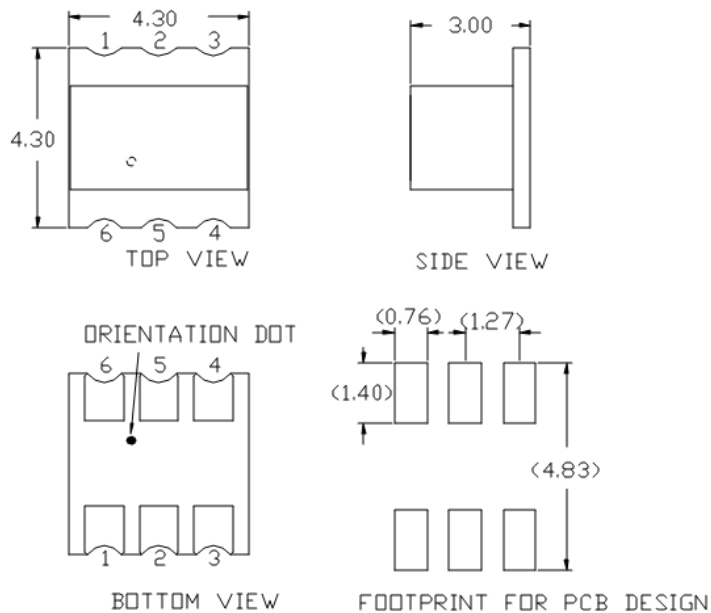
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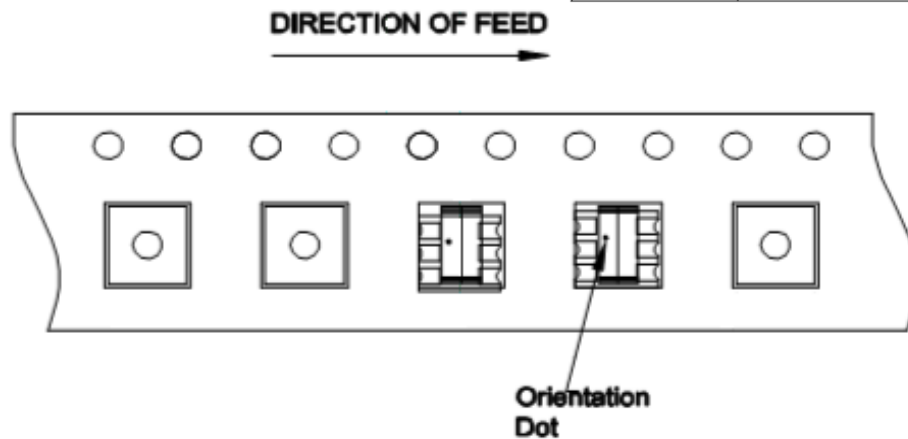
### Component dimensions:



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

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

### Carrier Tape Orientation



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