

# MAPD-010281-C2W024

**2 Way 0° Power Divider  
5 - 1200 MHz**

Rev. V2

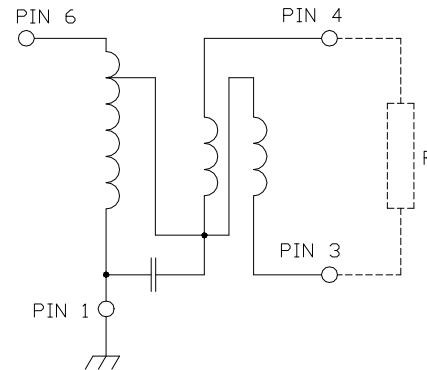
## Features

- Surface Mount
- 2 Way
- 0°
- RoHS\* Compliant
- Pb free.
- 260°C reflow compliant

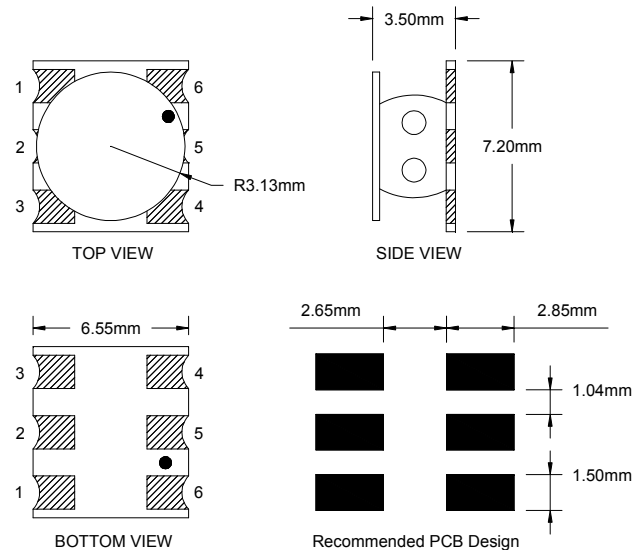
## Description

M/A-COM Technology Solutions MAPD-010281-C2W024 is a 2 Way 0° Power Divider in a low cost, surface mount package. Ideally suited for high volume CATV applications. An external 160Ω Chip resistor is required with this part.

## Schematic with external resistor



## Component Dimensions:



## Pin Configuration

Pin No.	Function
Input	6
Ground	1
Not Connected	2, 5
Port 1	4
Port 2	3

Dimensions in mm. Tolerance:  $\pm 0.20$ , unless otherwise stated.  
Drawing not to scale.

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

**ADVANCED:** Data Sheets contain information regarding a product M/A-COM Technology 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:  $T_A = 25^\circ\text{C}$ ,  $Z_0 = 75\Omega$**

Parameter	Test Conditions	Units	Min.	Typ.	Max.
Insertion Loss (Ref. Level -3dB)	5 – 500MHz	dB	–	3.50	3.90
	500 – 870MHz	dB	–	3.85	4.30
	870 – 1002MHz	dB	–	3.97	4.51
	1002 – 1200MHz	dB	–	4.29	5.10
Amplitude Unbalance	5 – 40MHz	dB	–	0.2	±0.6
	40 – 400MHz	dB	–	0.22	±0.4
	400 – 1200MHz	dB	–	0.27	±0.6
Phase Unbalance	5 – 500MHz	°	–	1.3	±4.0
	500 – 1200MHz	°	–	2.1	±6.0
Output Return Loss	5 – 40MHz	dB	17	21.0	–
	40 – 1002MHz	dB	18	26.0	–
	1002 – 1200MHz	dB	16	23.5	–
Input Return Loss	5 – 40MHz	dB	18	36.0	–
	40 – 1002MHz	dB	18	32.8	–
	1002 – 1200MHz	dB	18	22.6	–

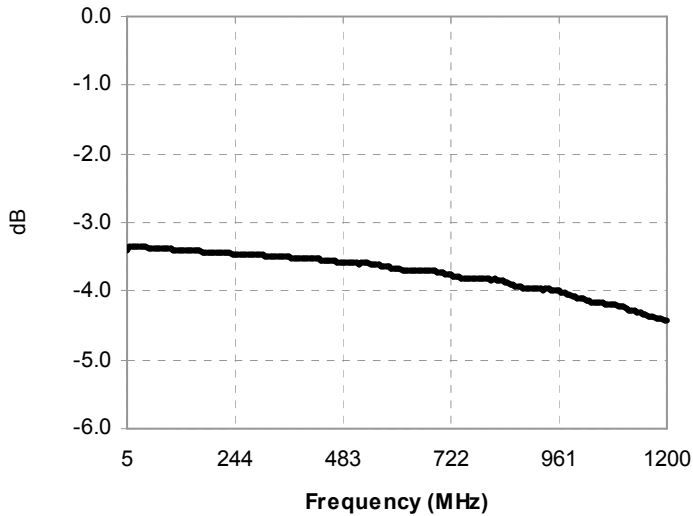
**Recommended Ratings<sup>1,2</sup>**

Parameter	Value
RF Power	+30dBm (1W)
DC Current	30 mA
Internal Load Dissipation	0.125W
Operating/Storage Temperature	-40° C to +125° C

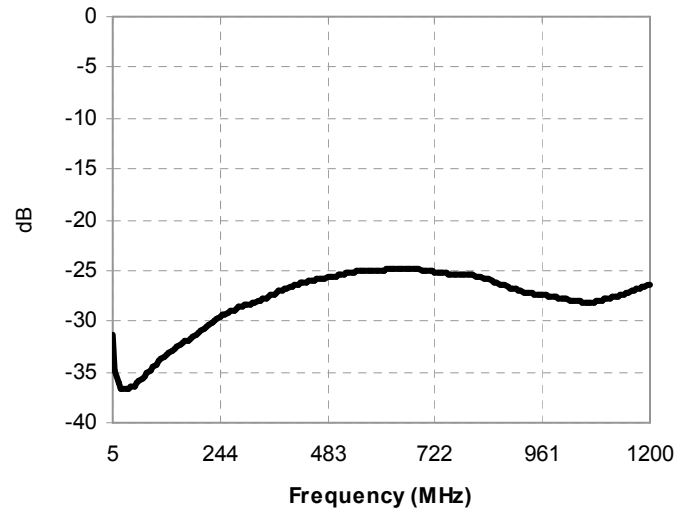
1. Exceeding any one or combination of these limits may cause permanent damage to this device.
2. M/A-COM Technology Solutions does not recommend sustained operation near these survivability limits.

Typical Performance Curves:  $T_A = 25^\circ\text{C}$ ,  $Z_0 = 75\Omega$

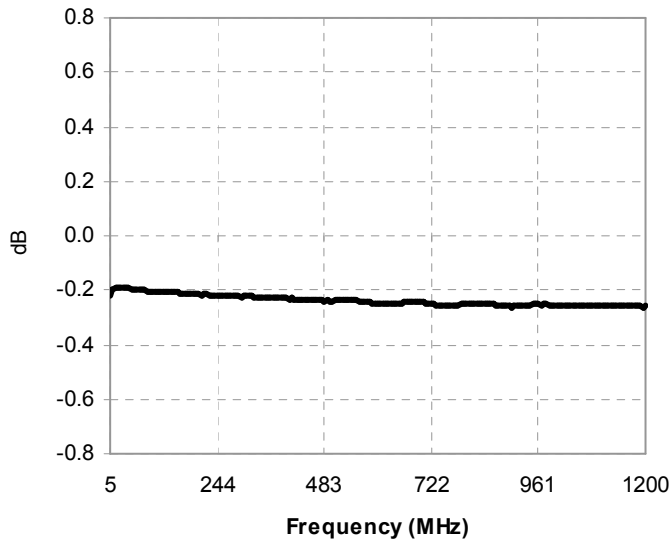
## Insertion Loss



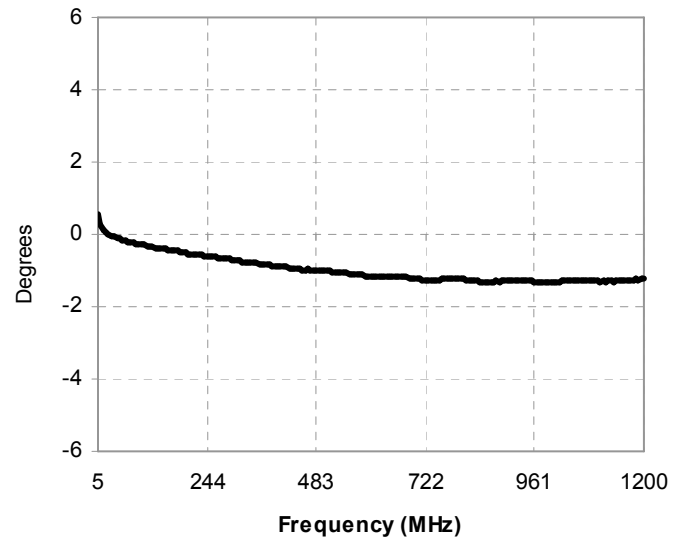
## Input Return Loss



## Amplitude Unbalance



## Phase Unbalance

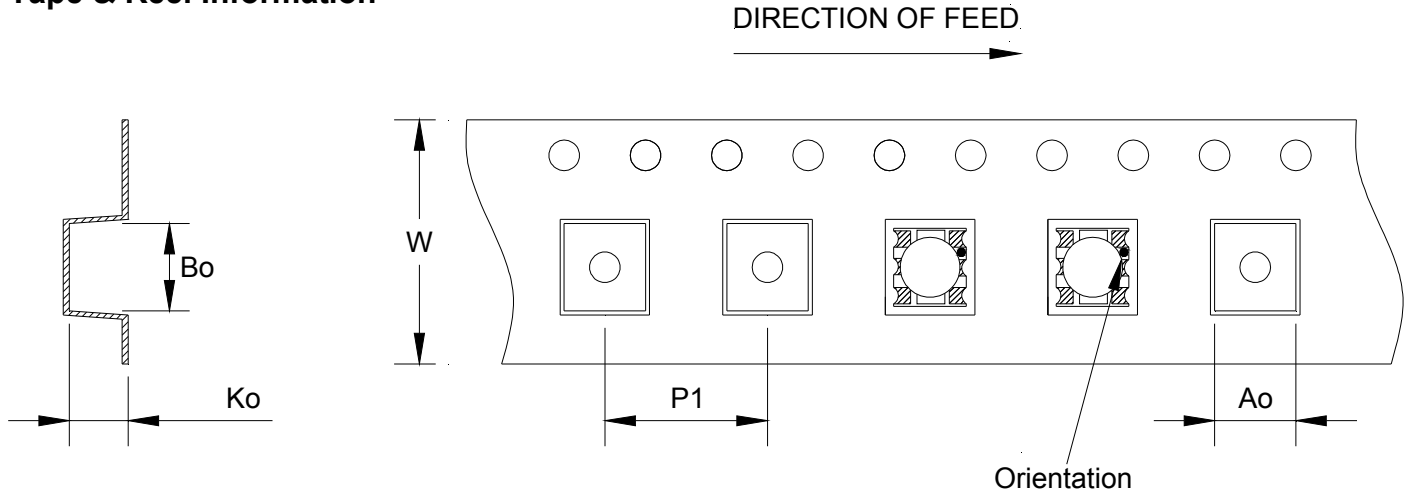


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## Tape & Reel Information



Item	Dimension
Ao	6.70mm +/- 0.1mm
Bo	7.50mm +/- 0.1mm
Ko	3.80mm +/- 0.1mm
W	16.00mm +/- 0.3mm
P1	12.00mm +/- 0.1mm

## Ordering Information

Part Number	Package
MAPD-010281-C2W024	900 piece reel
1000024116	Sample Test Board