

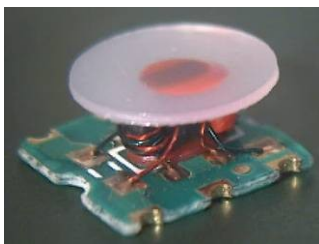
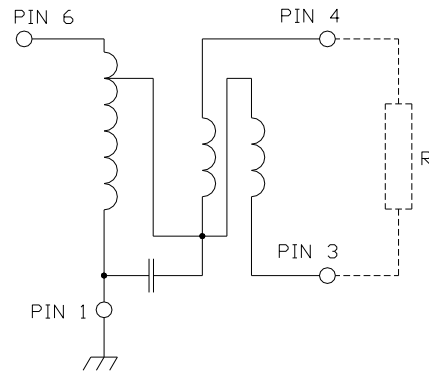
Features

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

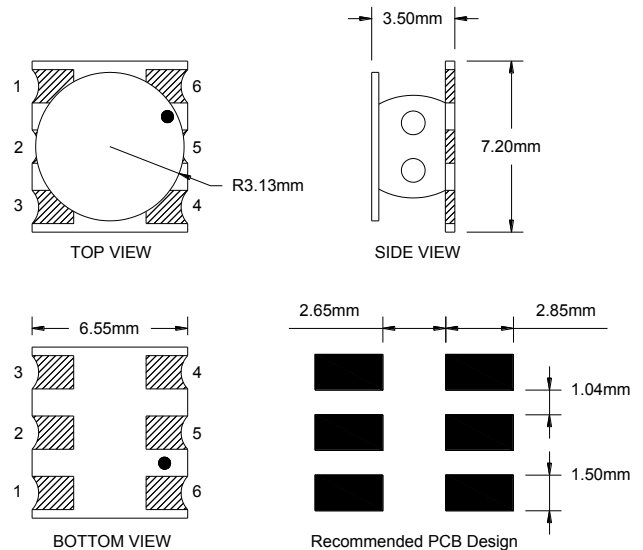
Description

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: ± 0.20 , unless otherwise stated. Drawing not to scale.

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

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	–

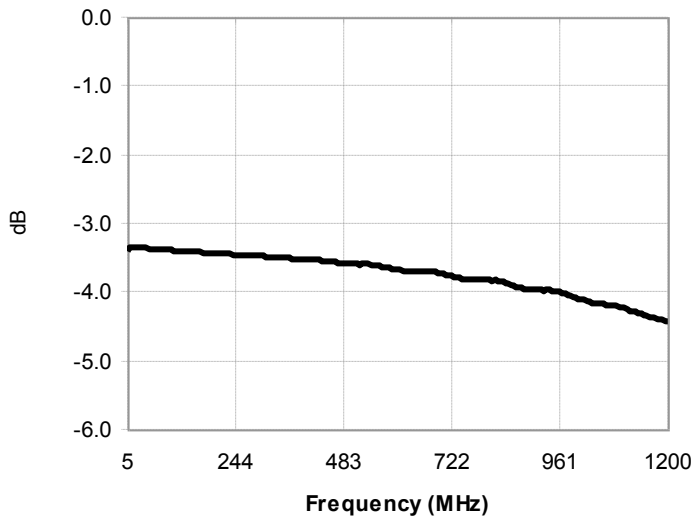
Recommended Ratings^{1,2}

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

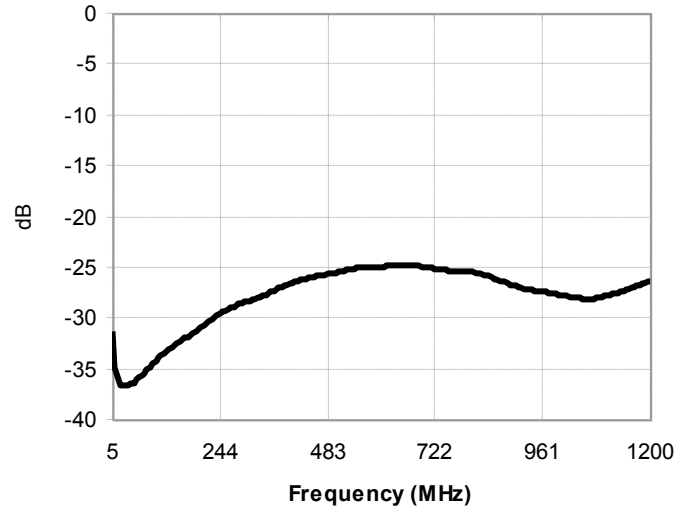
1. Exceeding any one or combination of these limits may cause permanent damage to this device.
2. M/A-COM Technology Solutions does not recommend sustained operation near these survivability limits.

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

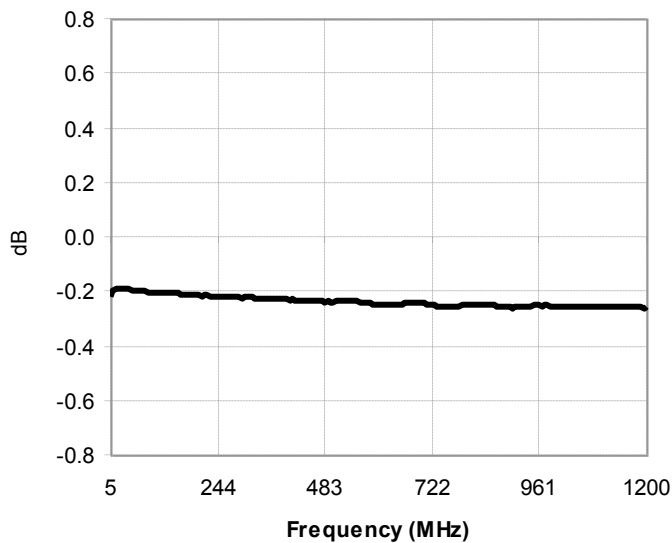
Insertion Loss



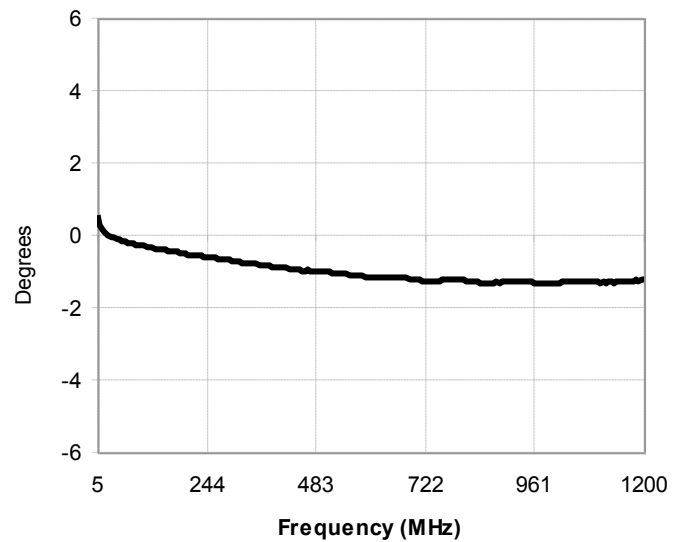
Input Return Loss



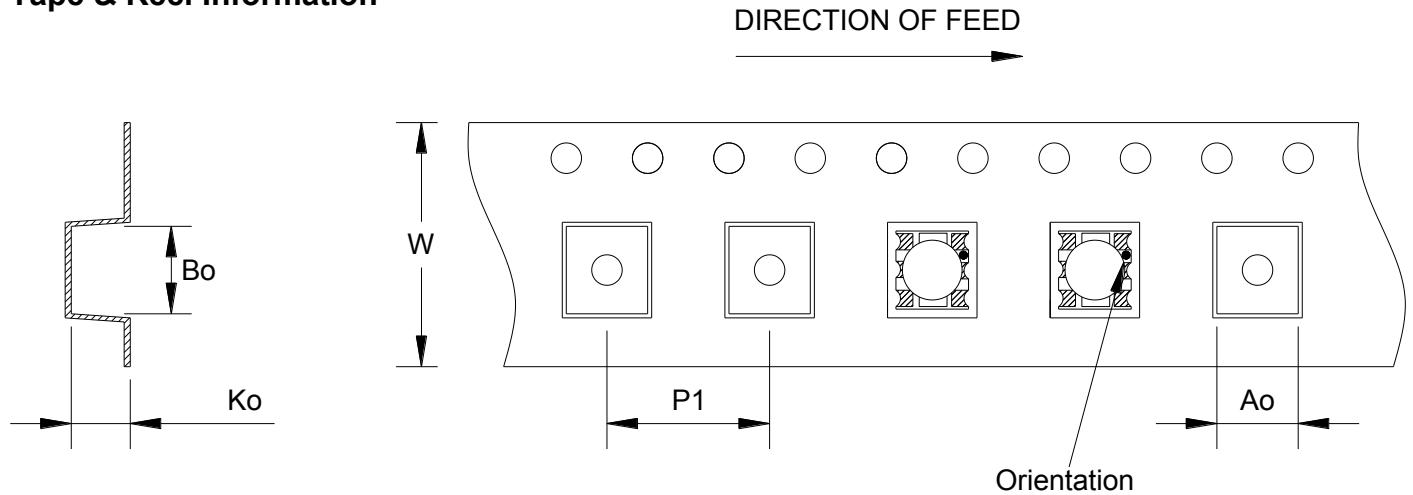
Amplitude Unbalance



Phase Unbalance



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

M/A-COM Technology Solutions Inc. All rights reserved.

Information in this document is provided in connection with M/A-COM Technology Solutions Inc ("MACOM") products. These materials are provided by MACOM as a service to its customers and may be used for informational purposes only. Except as provided in MACOM's Terms and Conditions of Sale for such products or in any separate agreement related to this document, MACOM assumes no liability whatsoever. MACOM assumes no responsibility for errors or omissions in these materials. MACOM may make changes to specifications and product descriptions at any time, without notice. MACOM makes no commitment to update the information and shall have no responsibility whatsoever for conflicts or incompatibilities arising from future changes to its specifications and product descriptions. No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document.

THESE MATERIALS ARE PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, RELATING TO SALE AND/OR USE OF MACOM PRODUCTS INCLUDING LIABILITY OR WARRANTIES RELATING TO FITNESS FOR A PARTICULAR PURPOSE, CONSEQUENTIAL OR INCIDENTAL DAMAGES, MERCHANTABILITY, OR INFRINGEMENT OF ANY PATENT, COPYRIGHT OR OTHER INTELLECTUAL PROPERTY RIGHT. MACOM FURTHER DOES NOT WARRANT THE ACCURACY OR COMPLETENESS OF THE INFORMATION, TEXT, GRAPHICS OR OTHER ITEMS CONTAINED WITHIN THESE MATERIALS. MACOM SHALL NOT BE LIABLE FOR ANY SPECIAL, INDIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, INCLUDING WITHOUT LIMITATION, LOST REVENUES OR LOST PROFITS, WHICH MAY RESULT FROM THE USE OF THESE MATERIALS.

MACOM products are not intended for use in medical, lifesaving or life sustaining applications. MACOM customers using or selling MACOM products for use in such applications do so at their own risk and agree to fully indemnify MACOM for any damages resulting from such improper use or sale.