

2 Way 0° Power Divider 5 - 1200 MHz

Rev. V4

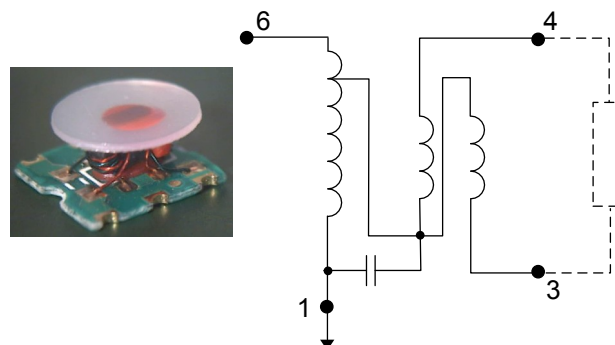
Features

- Surface Mount
- 2-Way
- 0°
- RoHS* Compliant, 260°C Reflow Compliant
- Pb Free

Description

The MAPD-010281-C2W024 is a 2 Way 0° power divider in a surface mount package. Ideally suited for high volume CATV applications. An external 160 Ω chip resistor is required with this part.

Schematic with external resistor



Pin Configuration

Pin #	Function	Pin #	Function
1	Ground	3	Output Port 2
2, 5	Not Connected	6	Input
4	Output Port 1		

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

Parameter	Freq. Test Conditions (MHz)	Units	Min.	Typ.	Max.
Insertion Loss (Ref. Level -3dB)	5 - 500	dB	—	3.50	3.80
	500 - 870			3.85	4.30
	870 - 1002			3.97	4.51
	1002 - 1200			4.29	5.10
Amplitude Unbalance	5 - 40	dB	—	0.2	± 0.6
	40 - 400			0.22	± 0.4
	400 - 1200			0.27	± 0.6
Phase Unbalance	5 - 500	°	—	1.3	± 3.0
	500 - 1200			2.1	± 5.0
Output Return Loss	5 - 40	dB	17	21.0	—
	40 - 1002		18	26.0	
	1002 - 1200		16	23.5	
Input Return Loss	5 - 40	dB	18	36.0	—
	40 - 1002		18	32.8	
	1002 - 1200		18	22.6	

Ordering Information

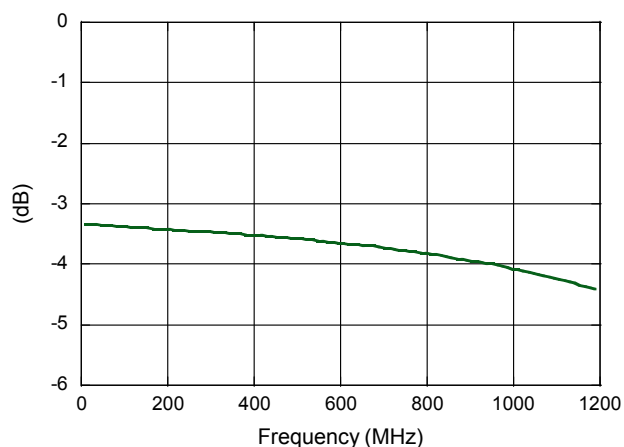
Part Number	Package
MAPD-010281-C2W024	900 piece reel
1000024116	Sample Test Board

Absolute Maximum Ratings

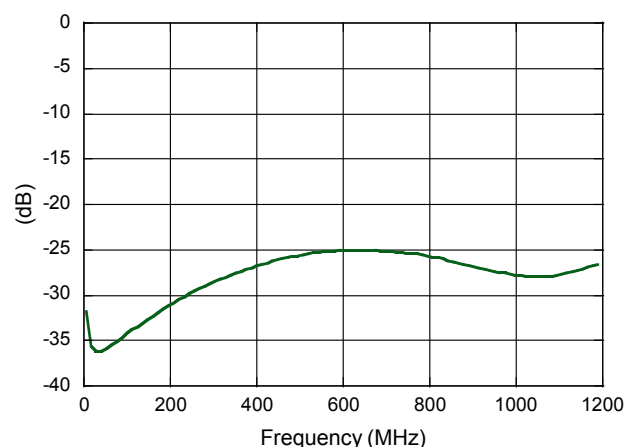
Parameter	Maximum Rating
RF Power	30 dBm (1 W)
DC Current	30 mA
Internal Load Dissipation	0.125 W
Operating / Storage Temperature	-40°C to +85°C

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

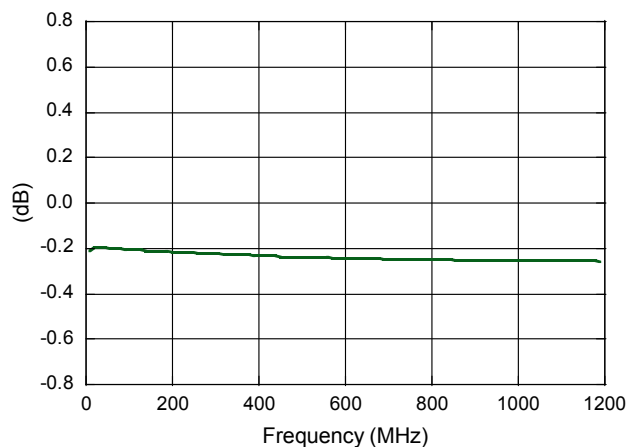
Insertion Loss



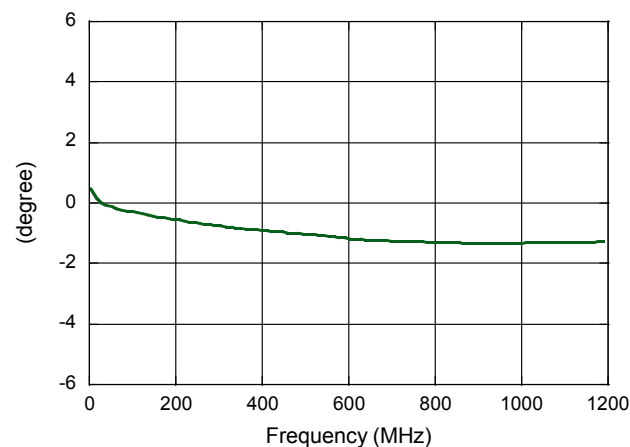
Input Return Loss



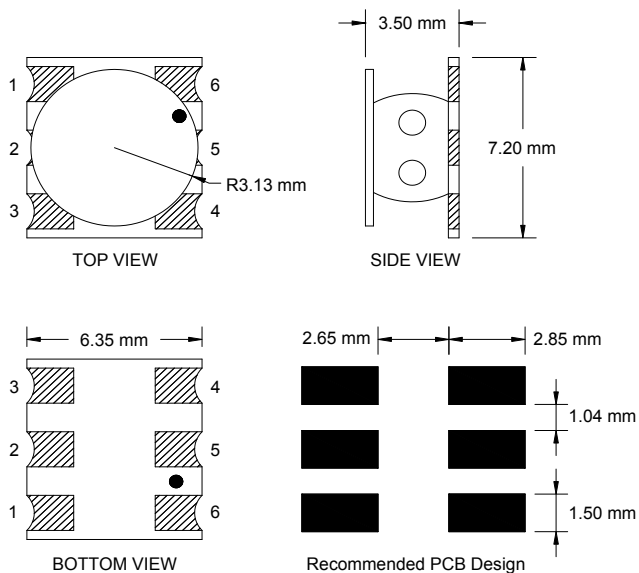
Amplitude Unbalance



Phase Unbalance

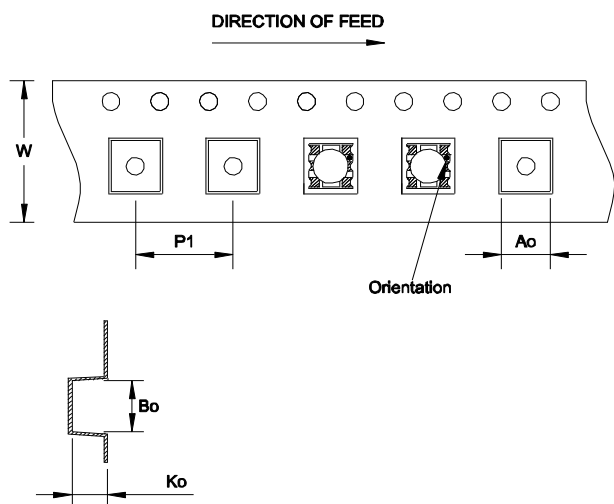


Case Style



Dimensions in mm. Tolerance: ± 0.20 , unless otherwise stated.
 Drawing not to scale.

Reel Orientation



Tape & Reel Information

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

MACOM Technology Solutions Inc. All rights reserved.

Information in this document is provided in connection with MACOM 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.