

2 Way Zero Degree Power Divider 5 - 1200 MHz

Rev. V6

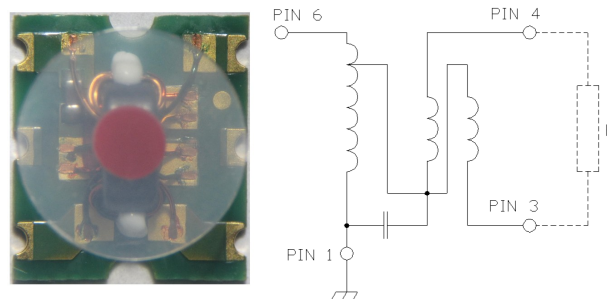
Features

- 2 Way Power Divider
- Surface Mount
- Available on Tape and Reel
- RoHS Compliant and Pb Free
- 260°C Reflow Compatible
- Suitable for all CATV, Broadband and FTTX applications

Description

The MAPDCT0024 is a 2 way power divider in a low cost surface mount package.

Functional Schematic



Pin Configuration

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

Electrical Specifications: Freq. = 5 - 1200 MHz, $T_A = 25^\circ\text{C}$, $Z_0 = 75\ \Omega$, $P_{IN} = 0\ \text{dBm}$

Parameter	Conditions (Freq. = MHz)	Units	Min.	Typ.	Max.
Insertion Loss (Ref. level -3 dB)	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 Balance	5 - 40	dB	-	0.2	± 0.6
	40 - 400			0.22	± 0.4
	400 - 1200			0.27	± 0.6
Phase Balance (Ref. value 0°)	5 - 500	°	-	1.3	± 4.0
	500 - 1200			2.1	± 6.0
Return Loss Input (Pin 6)	5 - 40	dB	18	36.0	-
	40 - 1002		18	32.8	
	1002 - 1200		18	22.6	
Return Loss Output (Pin 4 & 3)	5 - 40	dB	17	21.0	-
	40 - 1002		18	26.0	
	1002 - 1200		16	23.5	

Ordering Information

Part Number	Description
MAPDCT0024	900 piece reel

Recommended Maximum Ratings

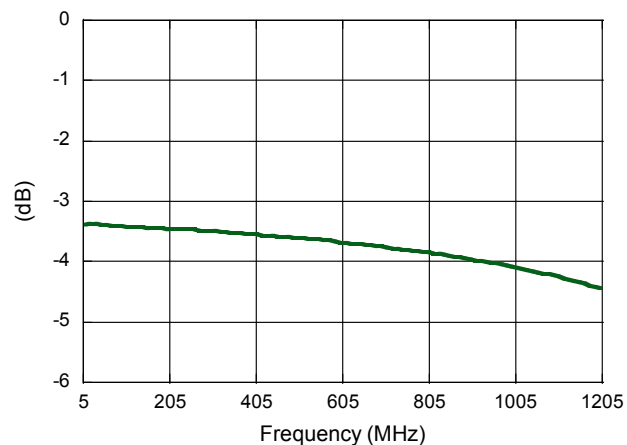
Parameter	Units
Input RF Power	30 mW
DC Current	30 mA
Internal Load Dissipation	0.125 W
Operating Temperature	-40°C to $+125^\circ\text{C}$

2 Way Zero Degree Power Divider 5 - 1200 MHz

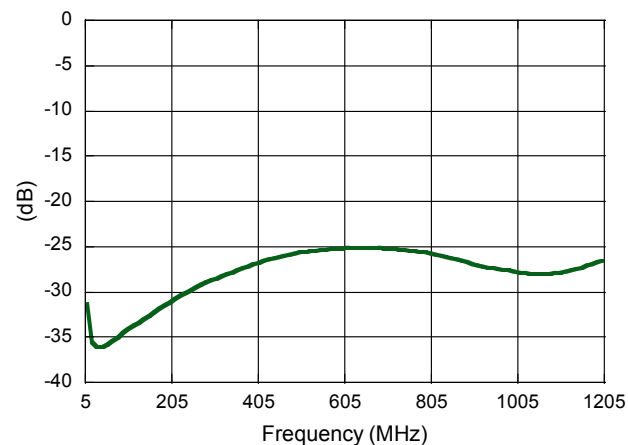
Rev. V6

Typical Performance Curves: $T_A = 25^\circ\text{C}$, $Z_0 = 75\ \Omega$, $P_{IN} = 0\ \text{dBm}$

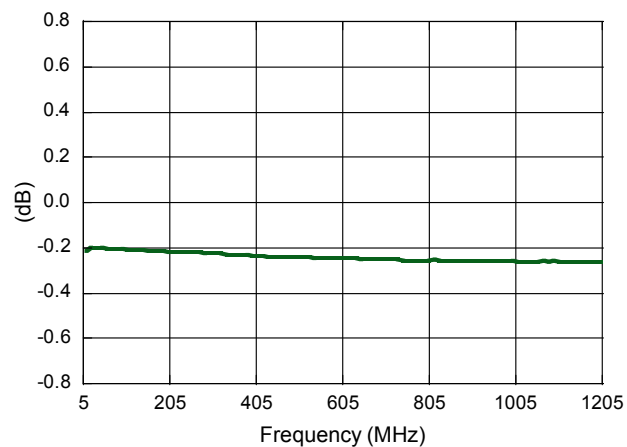
Insertion Loss



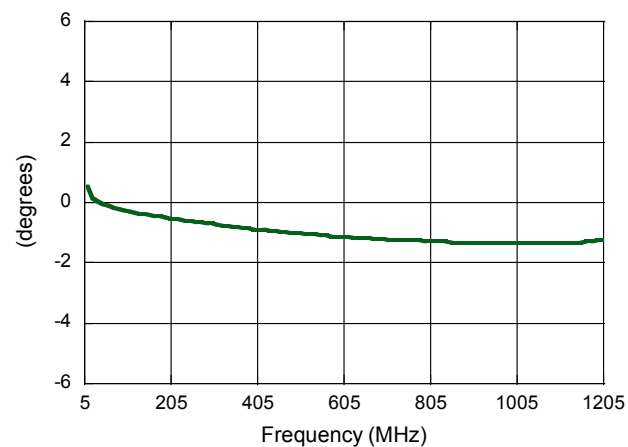
Input Return Loss



Amplitude Unbalance



Phase Unbalance

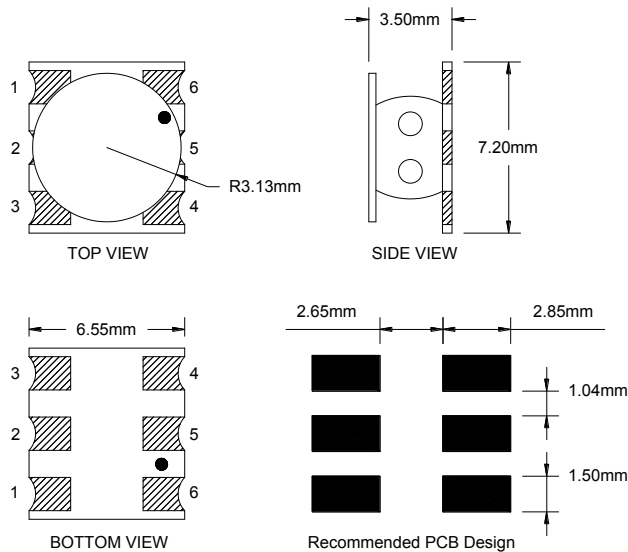


Full temperature plots available on request

2 Way Zero Degree Power Divider 5 - 1200 MHz

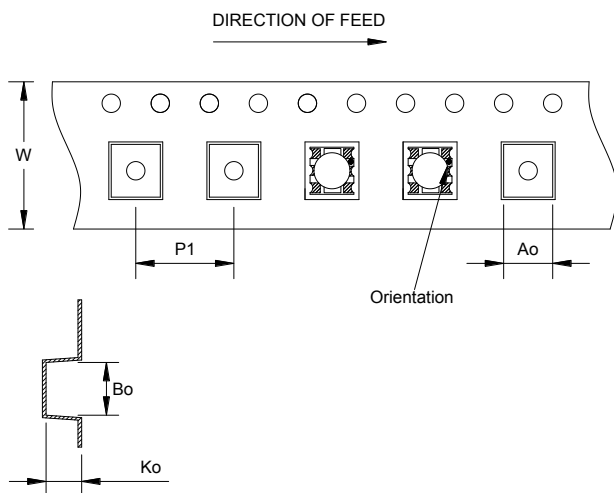
Rev. V6

Outline Drawing



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

Carrier Tape Orientation



Tape & Reel Information

Item	Dimension (mm)
Ao	6.70 +/- 0.1
Bo	7.50 +/- 0.1
Ko	3.60 +/- 0.1
W	16.00 +/- 0.3
P1	12.00 +/- 0.1

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.