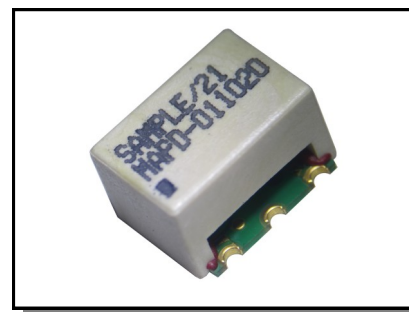


2 Way Power Divider 5 - 1200 MHz

Rev. V1

Features

- Surface mount
- 2 Way
- 0 Degree
- 75 Ohm
- Available on tape and reel
- RoHS compliant and lead free



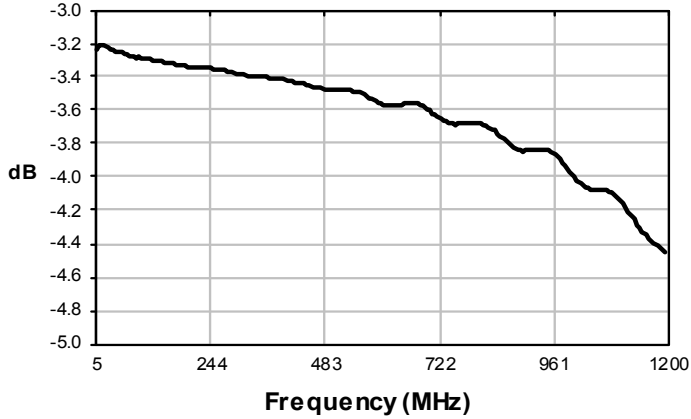
Description

MACOM's MAPD-011020 is a 2 way 0° power divider in a low cost, surface mount package. Ideally suited for high volume broadband CATV applications.

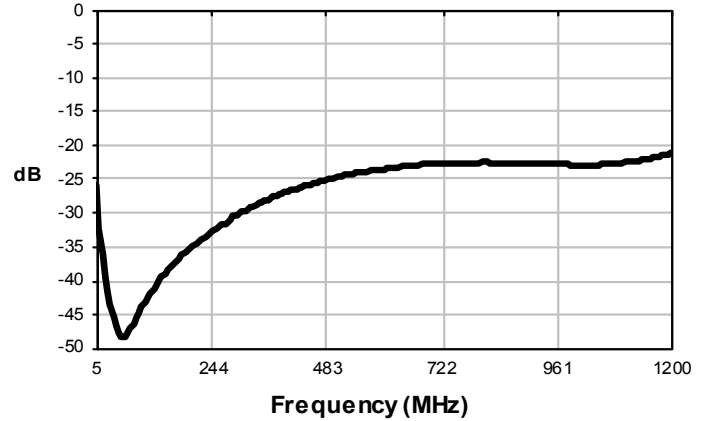
Electrical Specifications: $Z_0 = 75\Omega$, $T_A = 25^\circ\text{C}$, $P_{in} = 0\text{dBm}$

Parameter	Conditions	Units	Min	Typ	Max
Frequency Range		MHz	5		1200
Impedance		Ω		75	
Insertion Loss	5 - 500 MHz	dB	-	0.4	0.6
	500 - 870 MHz	dB	-	0.7	1.0
	870 - 1002 MHz	dB	-	0.9	1.3
	1002 - 1200 MHz	dB	-	1.2	1.9
Amplitude Balance	5 - 500 MHz	dB	-	0.0	± 0.1
	500 - 870 MHz	dB	-	0.0	± 0.2
	870 - 1002 MHz	dB	-	0.0	± 0.3
	1002 - 1200 MHz	dB	-	0.01	± 0.4
Phase Balance	5 - 500 MHz	$^\circ$	-	0.0	± 1.5
	500 - 870 MHz	$^\circ$	-	0.6	± 2.8
	870 - 1002 MHz	$^\circ$	-	1.5	± 3.5
	1002 - 1200 MHz	$^\circ$	-	2.2	± 4.7
Input Return Loss	5 - 500 MHz	dB	22	27	-
	500 - 1002 MHz	dB	20	27	-
	1002 - 1200 MHz	dB	13	20	-
Output Return Loss	5 - 1002 MHz	dB	20	32.1	-
	1002 - 1200 MHz	dB	17	23.3	-
Isolation	5 - 870 MHz	dB	-	32.3	20
	870 - 1002 MHz	dB	-	23.0	19
	1002 - 1200 MHz	dB	-	20.0	17

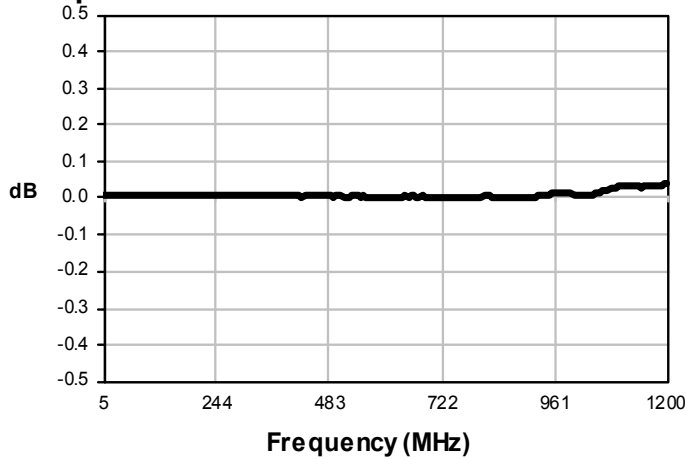
Insertion Loss



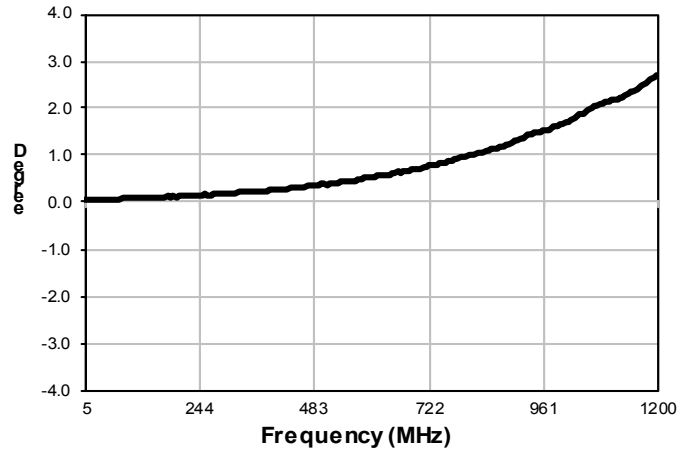
Isolation



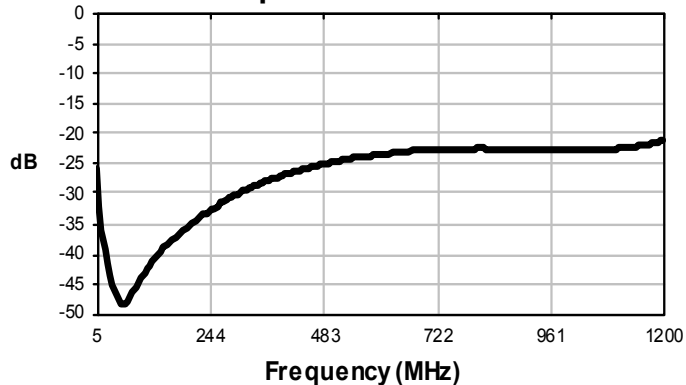
Amplitude Balance



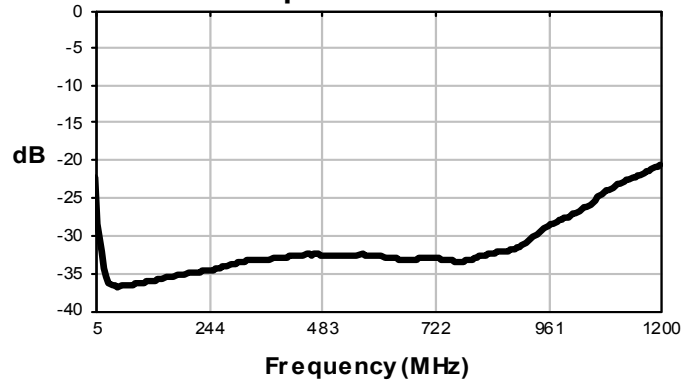
Phase Balance



Return Loss: Input

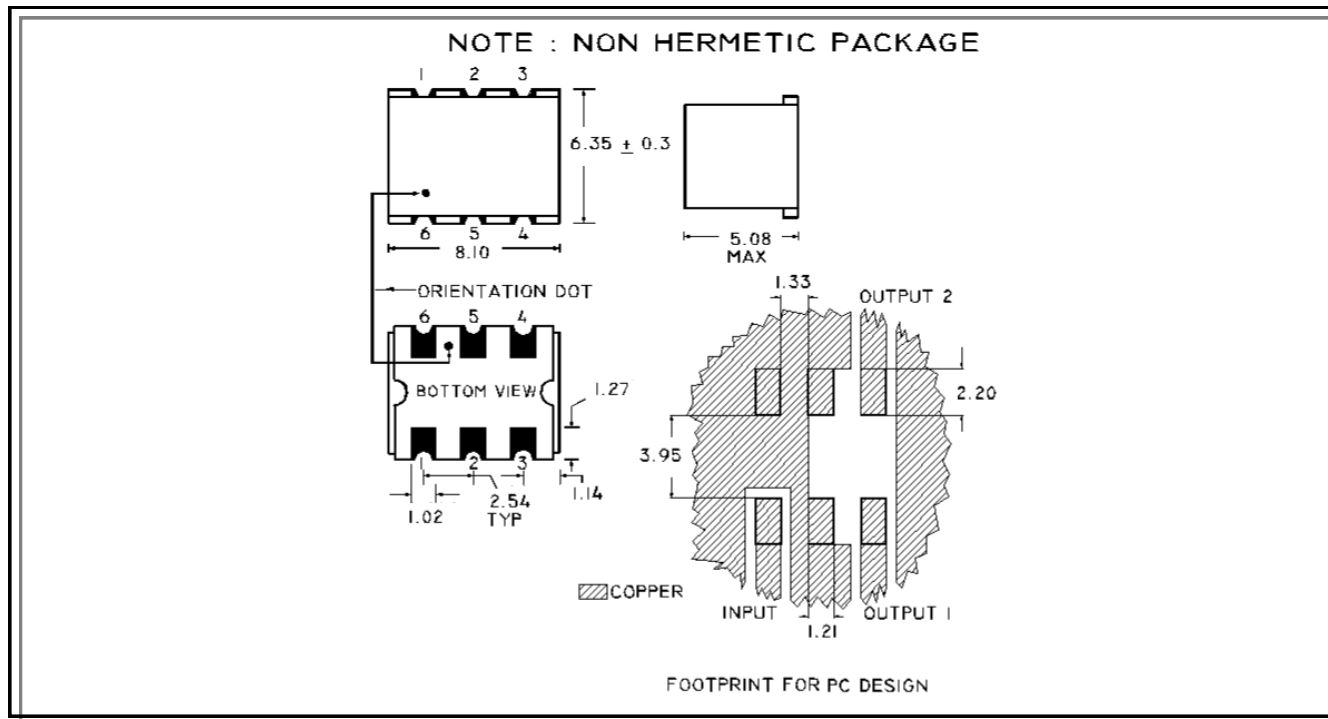


Return Loss: Output



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

Outline Drawing



1. Dimensions in mm.
2. Tolerance: ± 0.2 mm unless otherwise noted.
3. Model number and lot code are printed on the reel.
4. Finish: Electroless nickel immersion gold (ENIG)

Tape & Reel Information

Parameter	Units	Value
Qty per reel	-	900
Reel Size	mm	330
Tape Width	mm	16.00
Pitch	mm	12.00
Ao	mm	7.01
Bo	mm	8.61
Ko	mm	5.23
Orientation	-	F15
Reference Application Note ANI-019 for orientation		

Ordering Information

Part Number	Description
MAPD-011020	Tape & Reel

Recommended Maximum Ratings

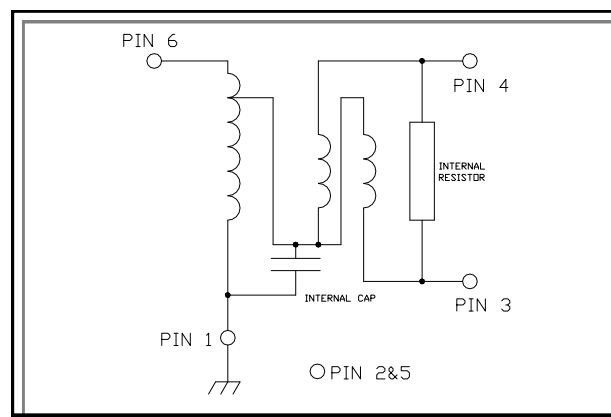
Parameter	Units	Min	Max
Input Power	W		1
DC Current	W		0.125
Operating Temperature Range	°C	-40	+85

Full temperature plots available on request

Pin Configuration

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

Schematic



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