![Chipsmall logo]

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

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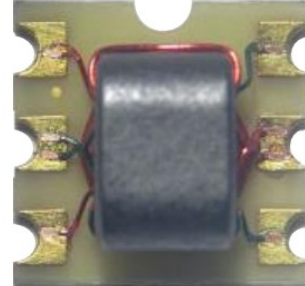
MAPD-011040

![MACOM logo]

2 Way 0° Power Divider
## 5 - 1225 MHz

Features

- 2 Way 0 Degree
- Surface mount
- Available on tape and reel
- 260º reflow compatible
- RoHS compliant and Pb free
- Excellent temperature stability
- Suitable for all CATV, Broadband and FTTX applications

Description

The MAPD-011040 is a 2 way 0 degree power divider in a low cost surface mount package. Ideally suited for high volume CATV/VSAT applications.

Functional Schematic
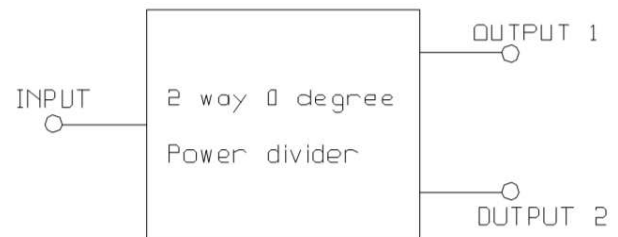
Ordering Information

Part Number	Package
MAPD-011040	Tape & Reel
MAPD-011040-TB	Customer Test Board

Pin Configuration

Pin No.	Function
1	Ground
2	External 0.5 pF Capacitor
3	Output 1
4	Output 2
5	External 0.5 pF Capacitor
6	Input

1

2 Way 0° Power Divider
5 - 1225 MHz

Rev. V3

Electrical Specifications: T_A = 25°C, Z_0 = 75 Ω, P_{in} = 0 dBm

Parameter	Conditions	Units	Min.	Typ.	Max.
Impedance	—	Ω	—	75	—
Power Split	—	dB	—	3	—
Insertion Loss 1 (Above 3 dB) (pin 6 - pin 3)	5 - 1000 MHz 1000 - 1225 MHz	dB	—	1.1 1.6	1.4 1.9
Insertion Loss 1 (Above 3 dB) (pin 6 - pin 4)	5 - 1000 MHz 1000 - 1225 MHz	dB	—	1.4 1.9	1.5 2.1
Amplitude Balance	5 - 1000 MHz 1000 - 1225 MHz	dB	-0.6 -0.6	0.35 0.35	0.6 0.6
Phase Balance	5 - 1000 MHz 1000 - 1225 MHz	º	-6.0 -7.0	5.0 6.0	6.0 7.0
Input Return Loss (pin 6)	5 - 1000 MHz 1000 - 1225 MHz	dB	12 10	14 12	—
Output Return Loss 1 (pin 3)	5 - 1000 MHz 1000 - 1225 MHz	dB	13 11	15 13	—
Output Return Loss 2 (pin 4)	5 - 1000 MHz 1000 - 1225 MHz	dB	16 13	18 15	—
Isolation (between outputs) (pin 3 - pin 4)	5 - 1000 MHz 1000 - 1225 MHz	dB	17 15	19 17	—

Recommended Maximum Ratings

Parameter	Absolute Maximum
Input Power	1 W
Internal Load Dissipation	0.125 W
Operating Temperature	-40ºC to +85°C

For further information and support please visit:
https://www.macom.com/support

DC-0011518

2 Way 0° Power Divider
5 - 1225 MHz

Rev. V3

PCB Layout
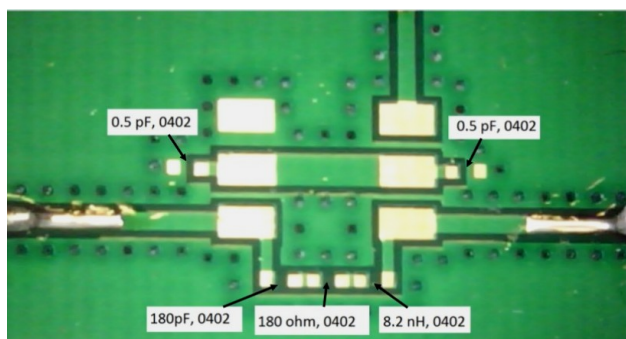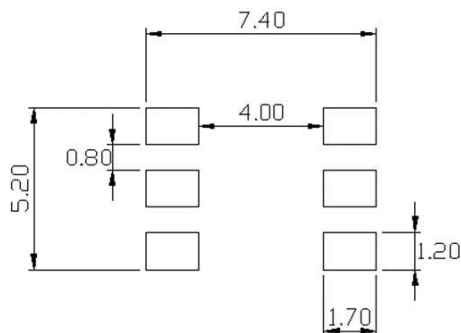
Connect centre pad to centre pad

Parts List

Part	Value	Case Style
C1, C2	0.5 pF	0402
C3	180 pF	0402
L1	8.2 nH	0402
R1	180 Ω	0402

Application Schematic

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DC-0011518

Typical Performance Curves: T_A = 25°C, Z_0 = 75 Ω, P_{in} = 0 dBm

Insertion Loss 1 (pin6-3)

Insertion Loss 2 (pin6-4)

Amplitude Balance

Phase Balance

Full temperature plots available on request

MAPD-011040
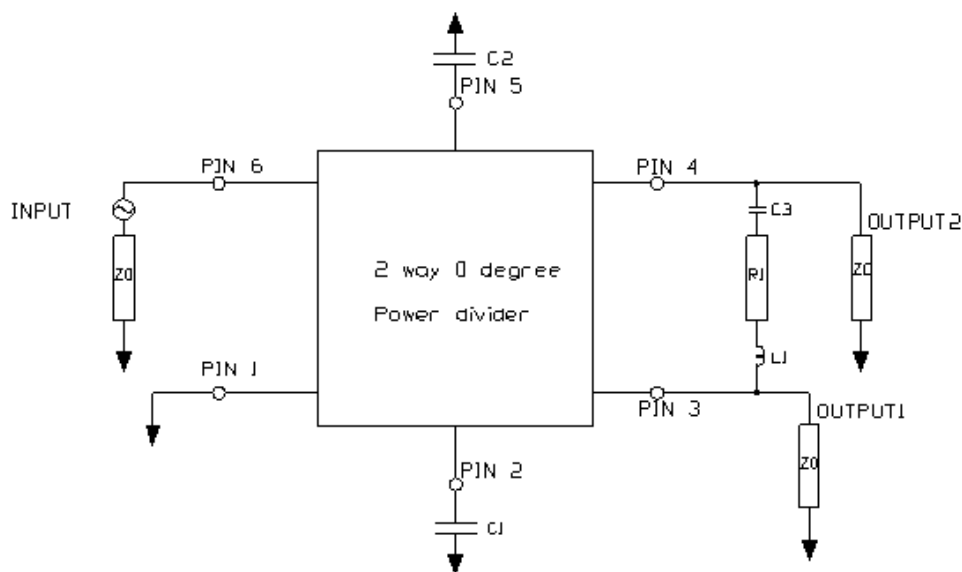
2 Way 0° Power Divider
5 - 1225 MHz

Rev. V3

Typical Performance Curves: T$_A$ = 25°C, Z$_0$ = 75 Ω, P$_{in}$ = 0 dBm
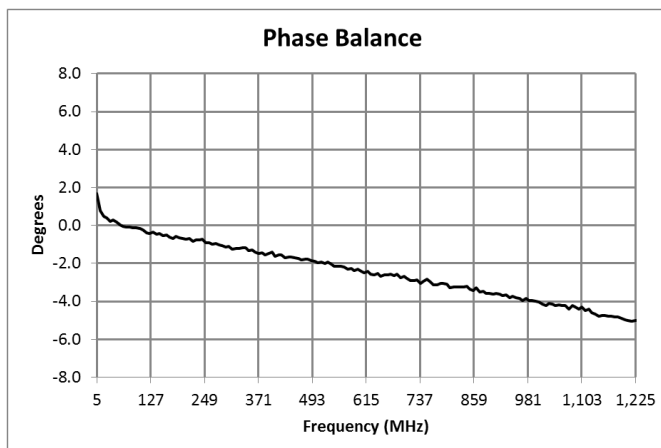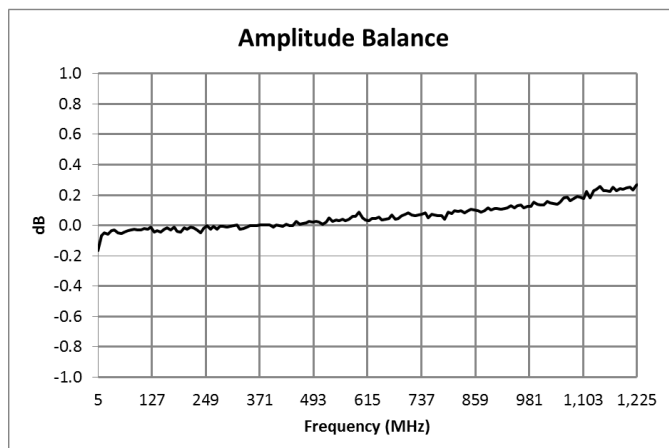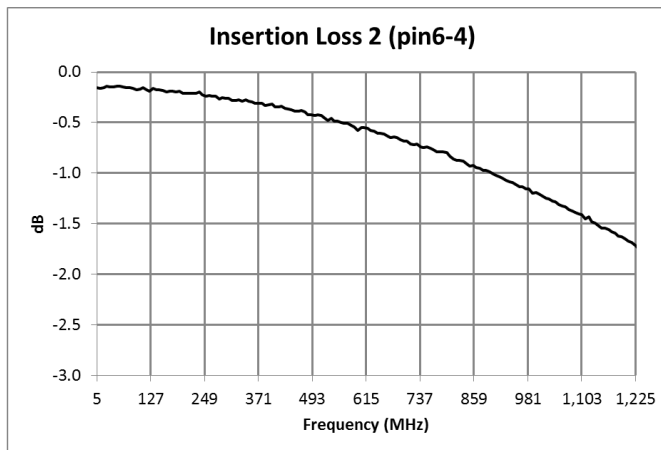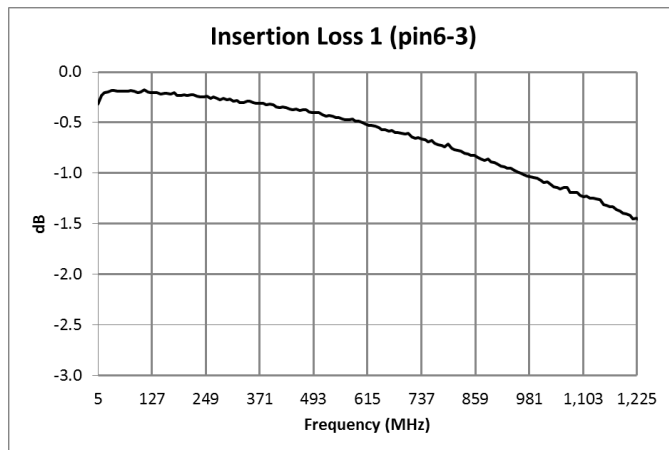
Input Return Loss (pin6)

Output Return Loss 1 (pin3)

Output Return Loss 2 (pin4)

Isolation (pin3-4)

Full temperature plots available on request

2 Way 0° Power Divider
5 - 1225 MHz
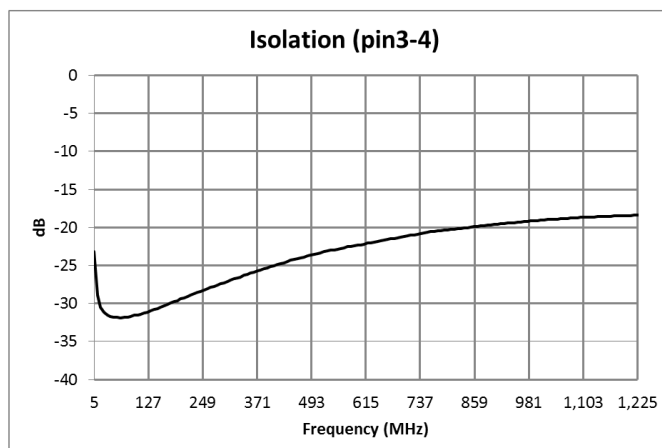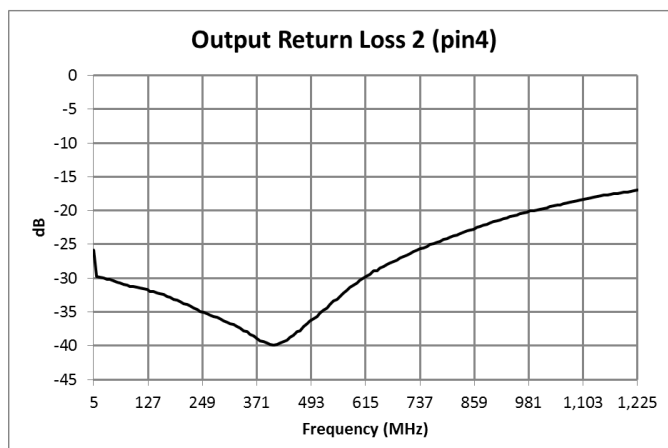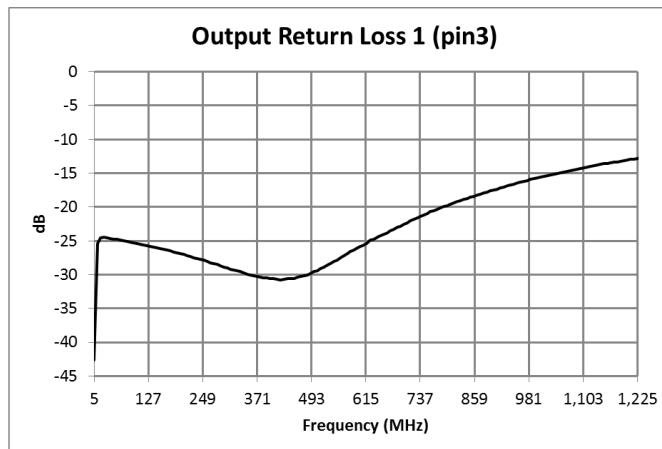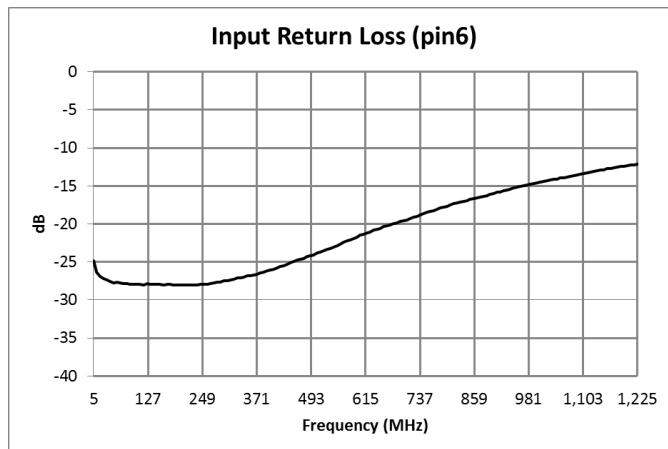
Outline Drawing
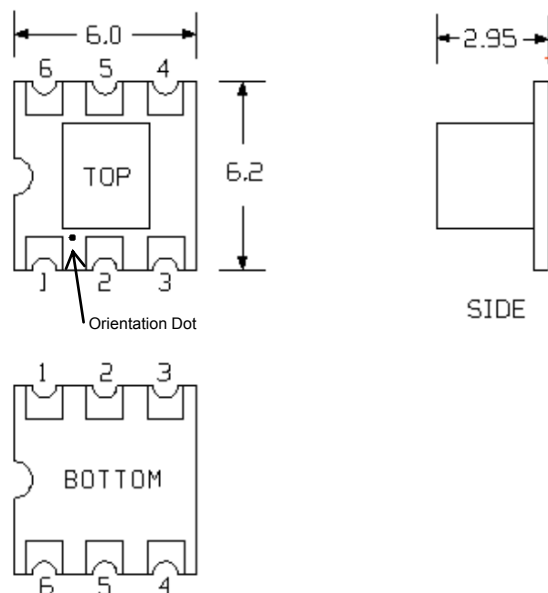
1. Dimensions in mm.
2. Tolerance: ±0.2 mm unless otherwise noted.
3. Model number and lot code are printed on the reel.
4. Plating finish: ENIG on both sides, 0.05 to 0.1 µm
   gold over 3 to 6 µm nickel

Carrier Tape Orientation
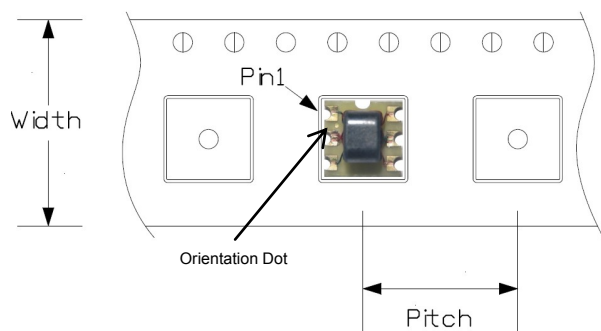
Tape & Reel Information

Parameter	Units	Value
Qty per reel	—	900
Reel Size	mm	330
Tape Width	mm	16.00
Pitch	mm	12.00
Orientation	—	F45
Reference Application Note ANI-019 for orientation		

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