



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.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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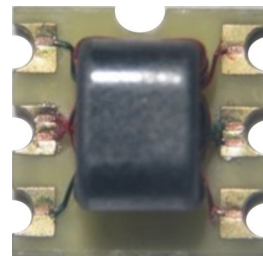
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Features

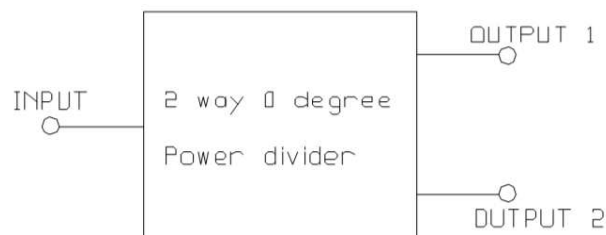
- 2 Way 0 Degree
- Surface mount
- Available on tape and reel
- 260° reflow compatible
- RoHS compliant and Pb free
- Excellent temperature stability
- Suitable for all CATV, Broadband and FTTX applications



Description

The MAPD-011035 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-011035	900 piece reel
MAPD-011035-TB	Customer test board

Pin Configuration

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

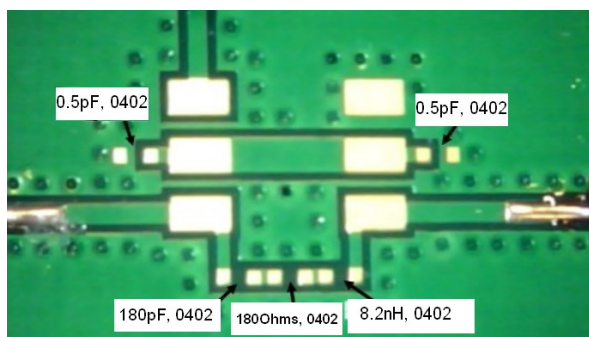
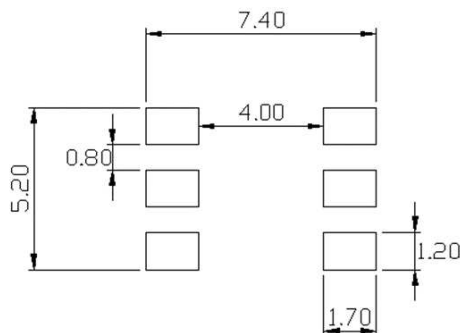
Electrical Specifications: $T_A = 25^\circ\text{C}$, $Z_0 = 75 \Omega$, $P_{in} = 0 \text{ dBm}$

Parameter	Conditions	Units	Min.	Typ.	Max.
Impedance	—	Ω	—	75	—
Power Split	—	dB	—	3	—
Insertion Loss 1 (Above 3 dB) (pin 1 - pin 3)	5 - 1000MHz 1000 - 1225 MHz	dB	—	1.0 1.4	1.3 1.8
Insertion Loss 1 (Above 3 dB) (pin 1 - pin 4)	5 - 1000MHz 1000 - 1225 MHz	dB	—	1.4 1.9	1.7 2.3
Amplitude Balance	5 - 1000MHz 1000 - 1225MHz	dB	-0.6 -0.8	0.5 0.6	0.6 0.8
Phase Balance	5 - 1000MHz 1000 - 1225MHz	°	-6.0 -7.0	5.0 6.0	6.0 7.0
Input Return Loss (pin 1)	5 - 1000 MHz 1000 - 1225 MHz	dB	14 11	16 13	—
Output Return Loss 1 (pin 3)	5 - 1000 MHz 1000 - 1225 MHz	dB	15 12	17 14	—
Output Return Loss 2 (pin 4)	5 - 1000 MHz 1000 - 1225 MHz	dB	16 13	18 14	—
Isolation (between outputs) (pin 3 - pin 4)	5 - 1000 MHz 1000 - 1225 MHz	dB	17 16	19 18	—

Recommended Maximum Ratings

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

PCB Layout

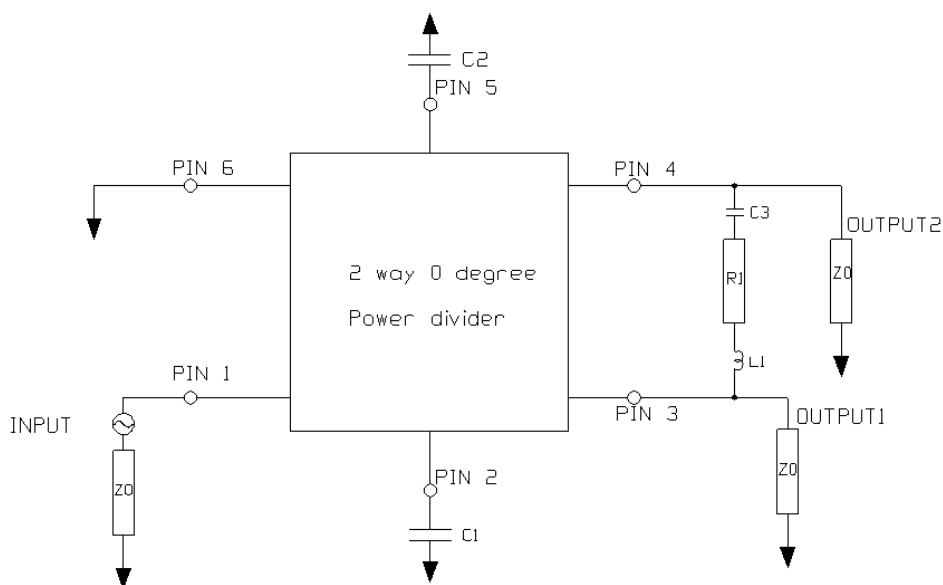


Connect centre pad to centre pad

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

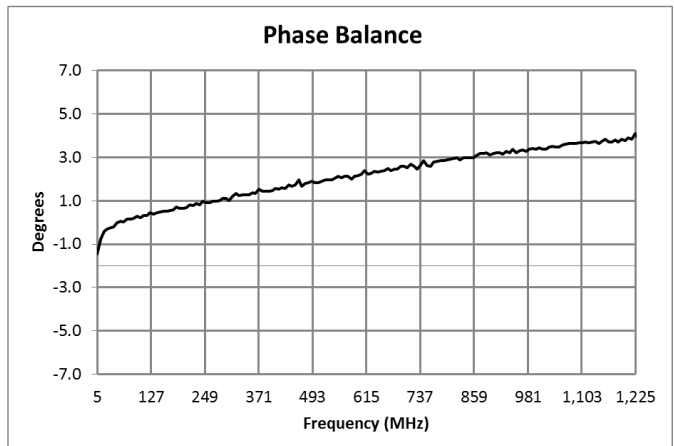
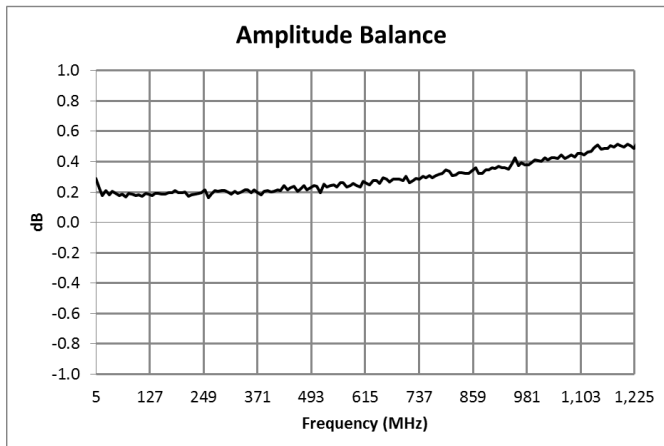
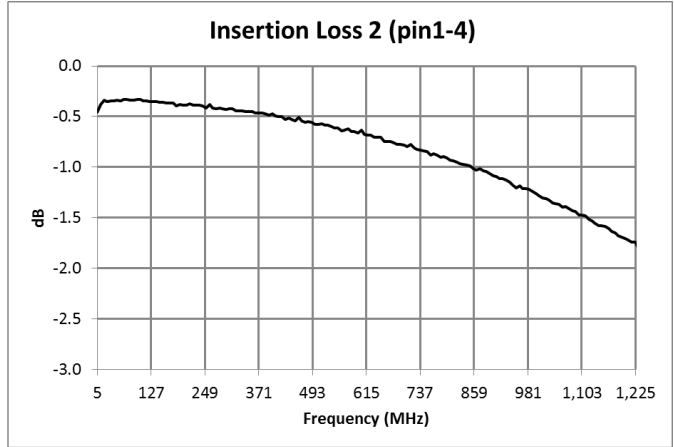
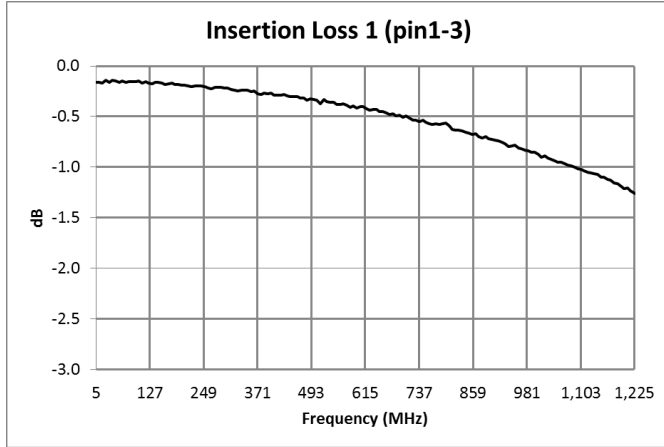
Application Schematic



2 Way, 0° Power Divider 5 - 1225 MHz

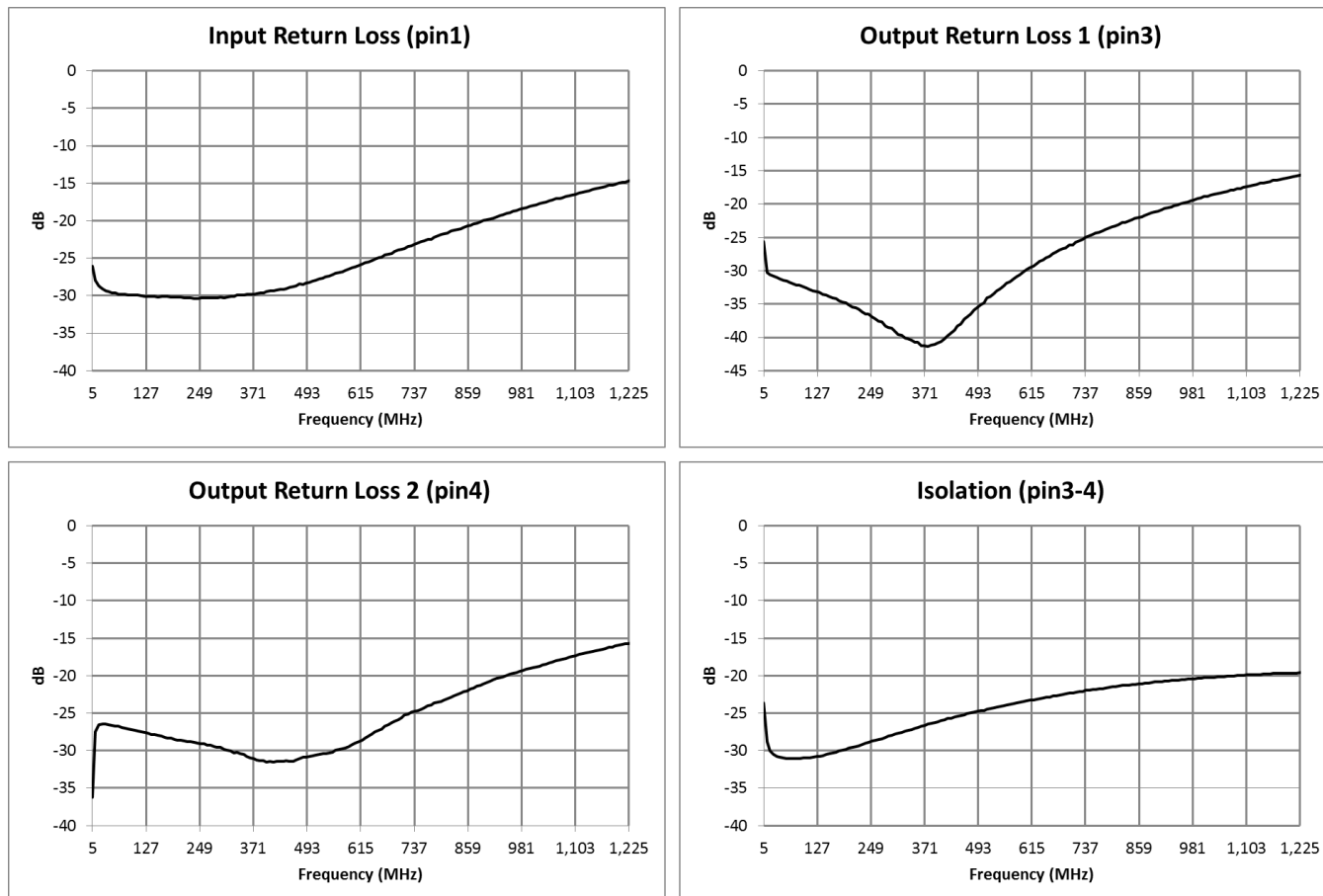
Rev. V3

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



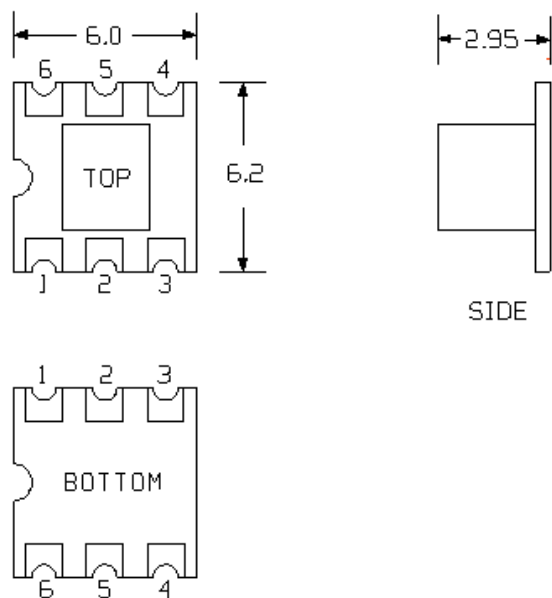
Full temperature plots available on request

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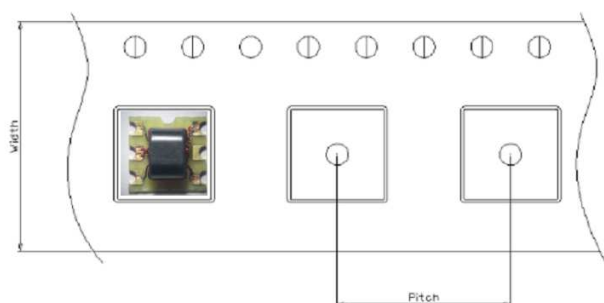
Full temperature plots available on request

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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