

## 3-Way 0° Power Divider 5 - 300 MHz

Rev. V2

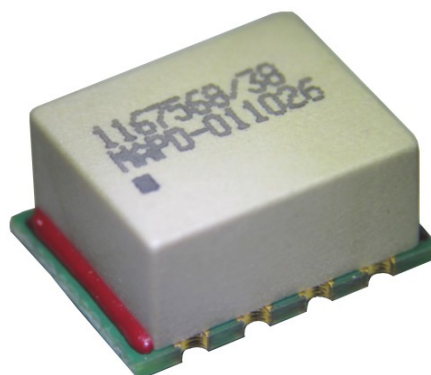
### Features

- Surface Mount
- 3 way 0 degree
- 260°C Reflow Compatible
- RoHS Compliant, lead free
- Available on Tape and Reel

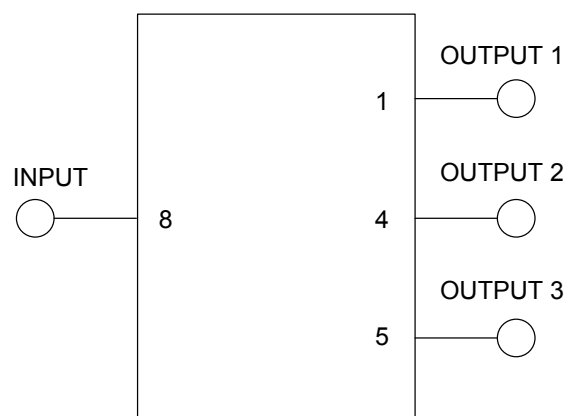
### Description

The MAPD-011026 is a 3 Way 0° power divider in a low cost, surface mount package.

Ideally suited for high volume CATV applications.



### Functional Schematic



### Ordering Information

Part Number	Description
MAPD-011026	500 pc reel
MAPD-011026-TB	Sample Test Board

### Pin Configuration

Pin No.	Pin Name
1	Output Port 1
2,3,6,7	Ground
4	Output Port 2
5	Output Port 3
8	Input

\* Restrictions on Hazardous Substances, European Union Directive 2011/65/EU.

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

Parameter	Frequency	Units	Min.	Typ.	Max.
Insertion Loss (Ref value: 4.77 dB)	5 - 204 MHz 204 - 300 MHz	dB	-	5.1 5.2	5.2 5.3
Isolation	5 - 200 MHz 200 - 300 MHz	dB	25 22	27 23	—
Amplitude Balance	5 - 204 MHz 204 - 300 MHz	dB	—	0.04 0.10	0.1 0.2
Phase Balance	5 - 204 MHz 204 - 300 MHz	deg.	—	0.35 0.65	0.9 1.5
Input Return Loss	5 - 204 MHz 204 - 300 MHz	dB	31 26	34 30	—
Output Return Loss	5 - 204 MHz 204 - 300 MHz	dB	23 20	26 23	—

### Absolute Maximum Ratings<sup>4,5</sup>

Parameter	Absolute Maximum
RF Input Power	0.5 W
DC Current	500 mA
Operating Temperature	-40°C to +85°C

- Exceeding any one or combination of these limits may cause permanent damage to this device.
- MACOM does not recommend sustained operation near these survivability limits.
- Full temperature plots available on request.

### Handling Procedures

Please observe the following precautions to avoid damage:

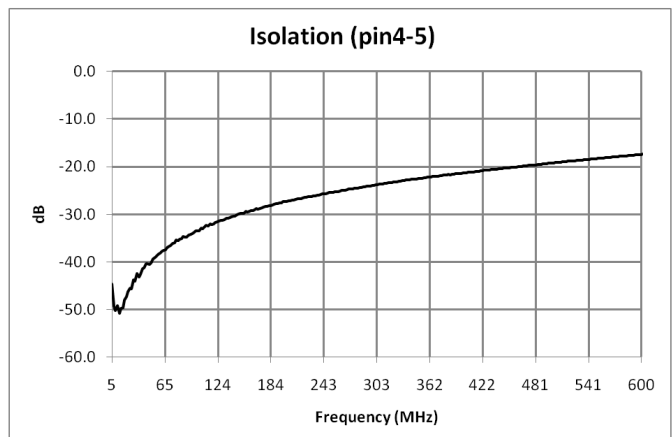
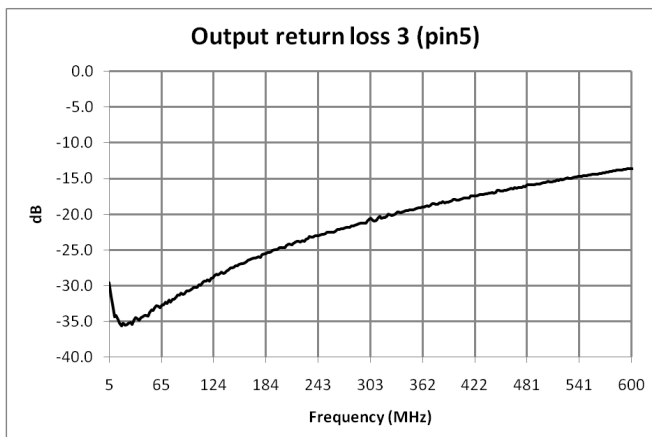
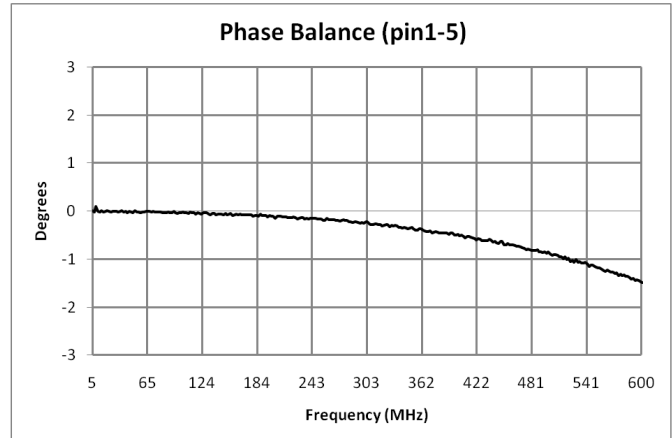
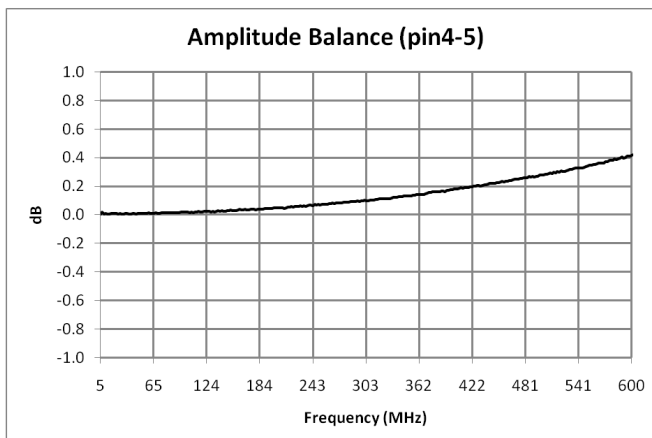
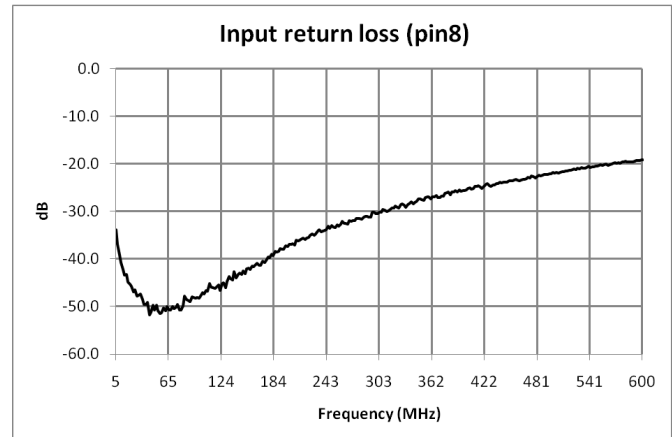
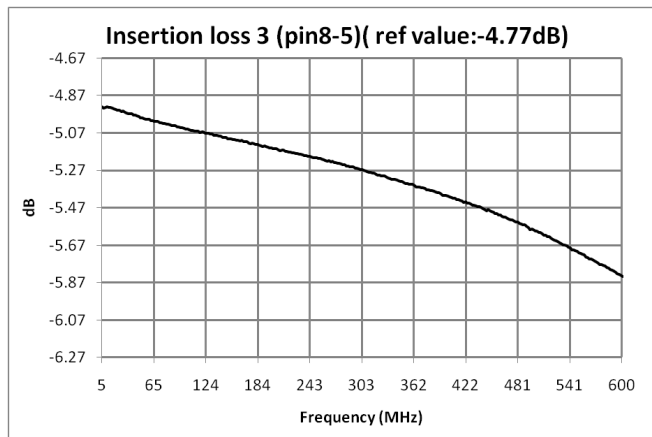
### Static Sensitivity

These electronic devices are sensitive to electrostatic discharge (ESD) and can be damaged by static electricity. Proper ESD control techniques should be used when handling these devices.

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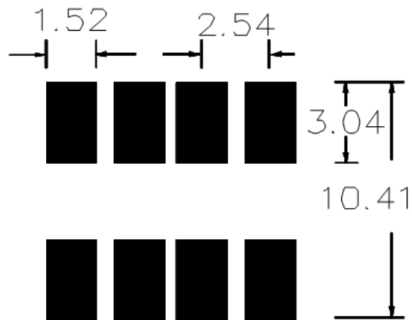
### Typical Performance Curves



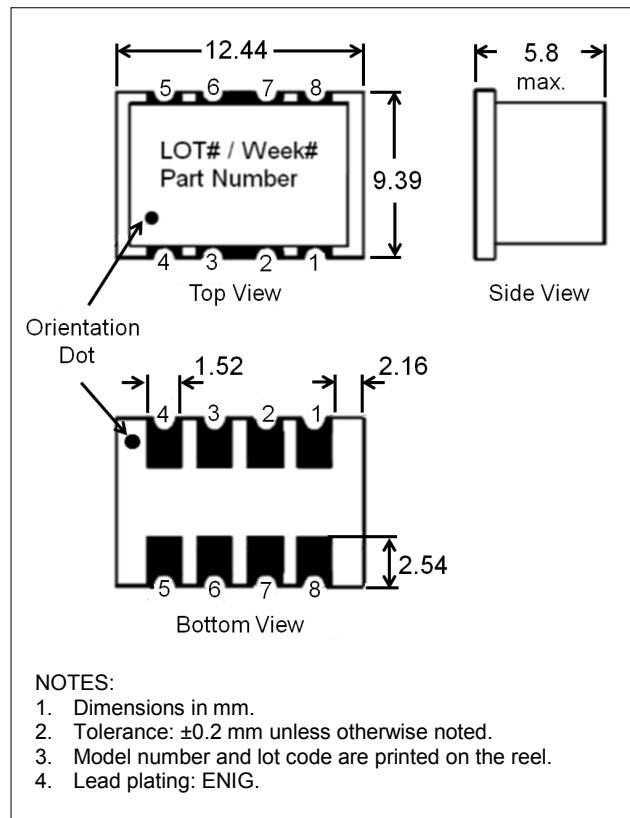
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### Recommended PCB Layout



### Outline Drawing



### Tape & Reel Information

Item	Dimension
Ao	10.26 mm $\pm 0.1$ mm
Bo	13.46 mm $\pm 0.1$ mm
Ko	6.10 mm $\pm 0.1$ mm
W	24.00 mm $\pm 0.3$ mm
P1	16.00 mm $\pm 0.1$ mm
Orientation	F2
Reference Application Note ANI-019 for orientation	

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