

## 3-Way 0° Power Divider 5 - 300 MHz

Rev. V2

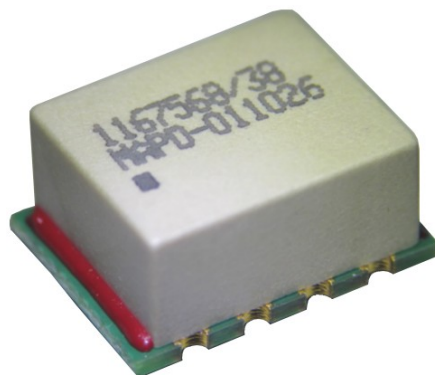
### Features

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

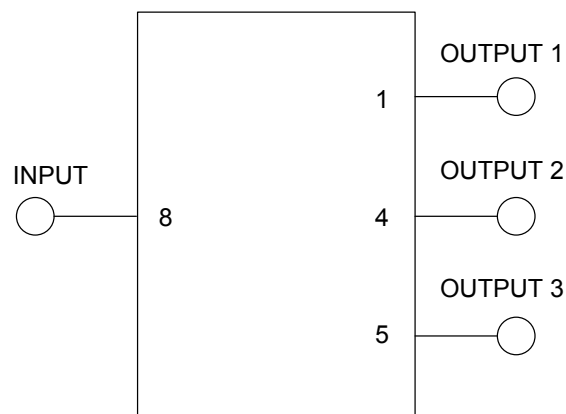
### Description

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

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

### Handling Procedures

Please observe the following precautions to avoid damage:

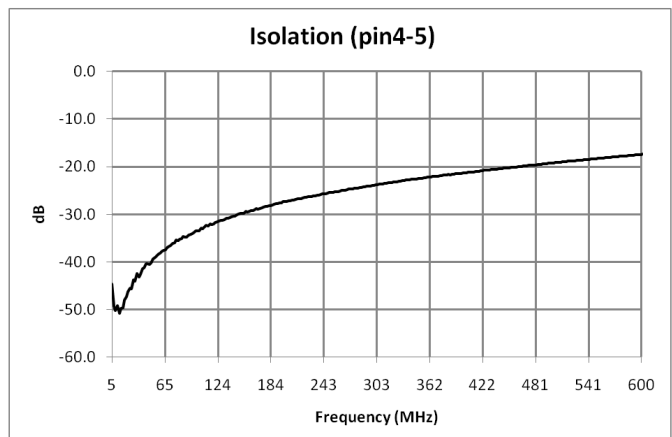
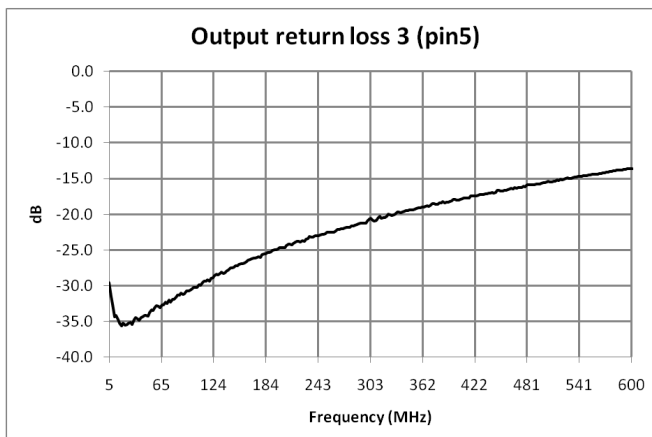
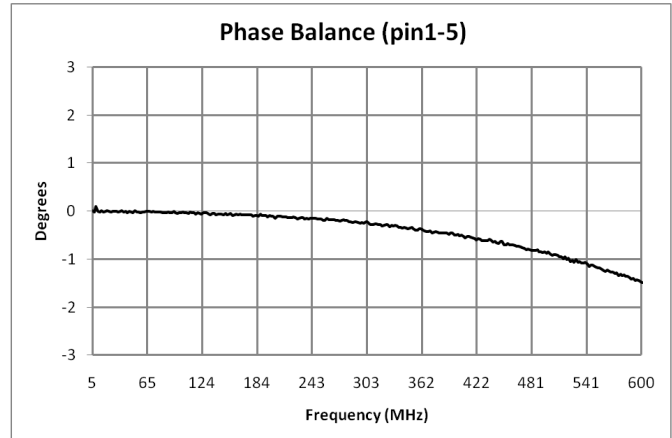
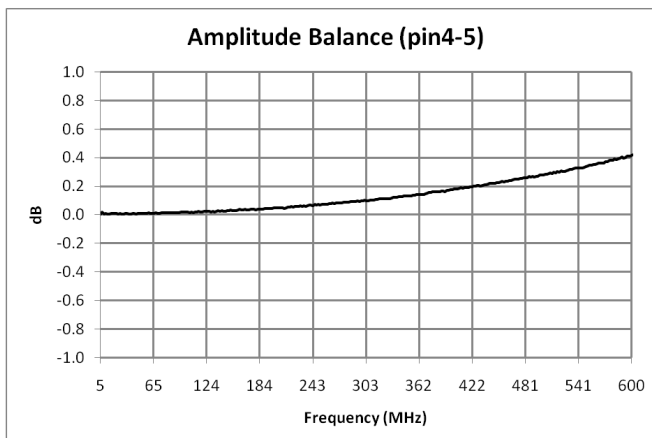
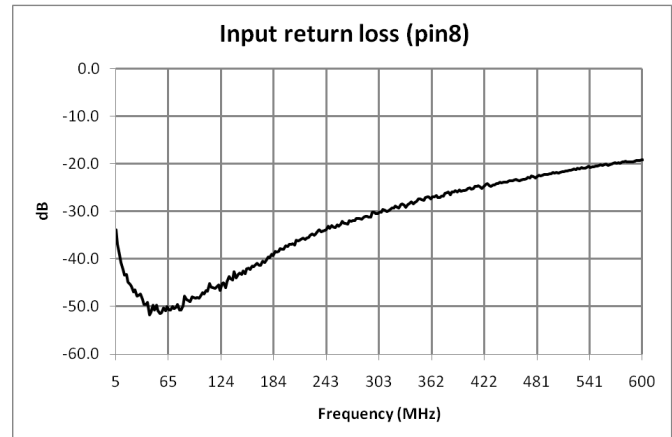
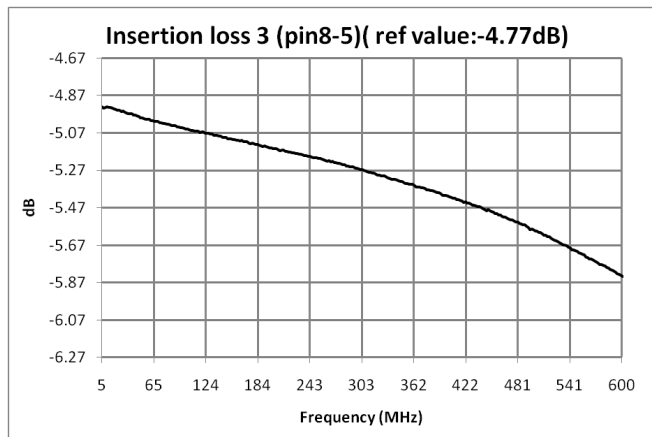
### Static Sensitivity

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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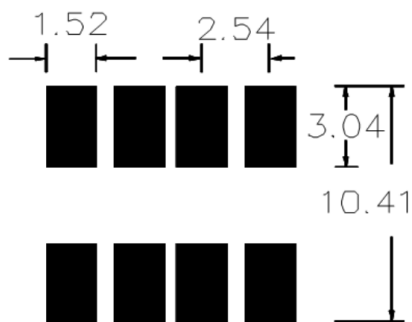
### Typical Performance Curves



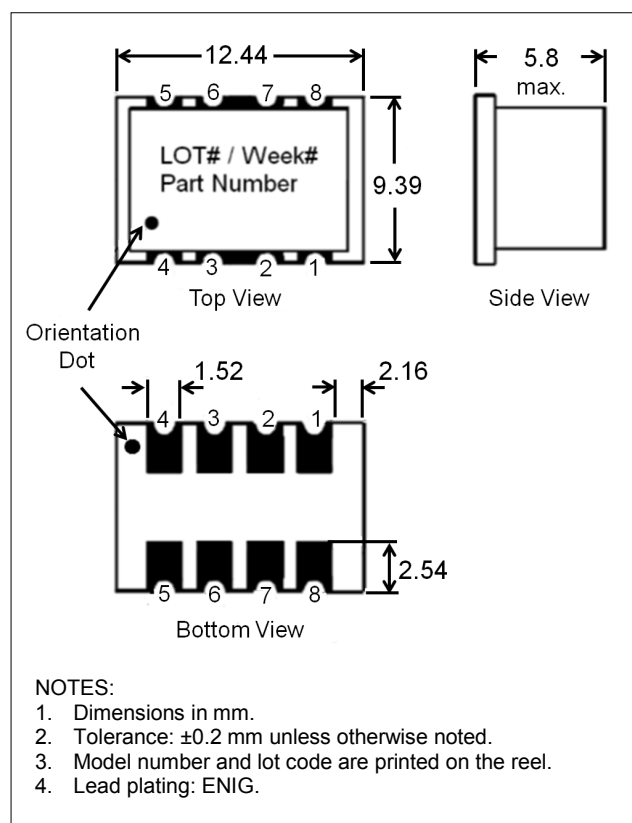
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### Recommended PCB Layout



### 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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