

Rev. V2

#### **Features**

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

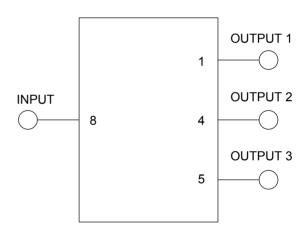
### **Description**

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		

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



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

Parameter	Frequency	Units	Min.	Тур.	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	

<sup>4.</sup> Exceeding any one or combination of these limits may cause permanent damage to this device.

#### **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.

MACOM does not recommend sustained operation near these survivability limits.

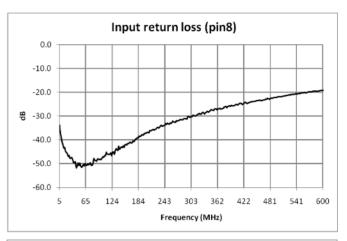
<sup>6.</sup> Full temperature plots available on request.

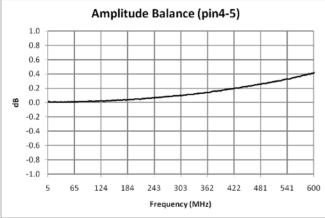


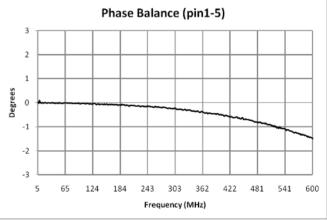
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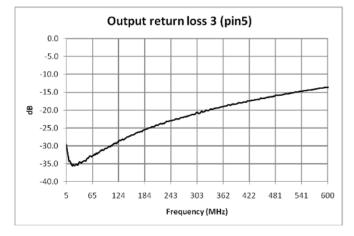
# **Typical Performance Curves**

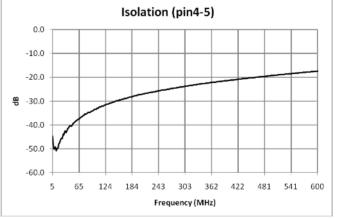








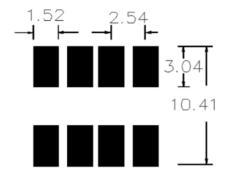




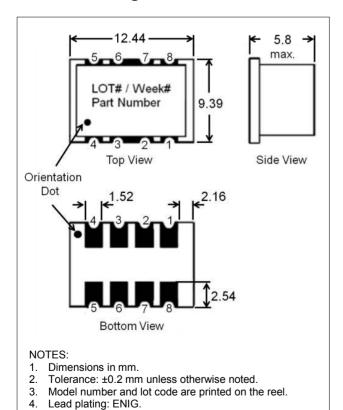


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## **Recommended PCB Layout**



## **Outline Drawing**



## **Tape & Reel Information**

Item	Dimension	
Ao	10.26 mm +/-0.1 mm	
Во	13.46 mm +/-0.1 mm	
Ko	6.10 mm +/-0.1 mm	
W	24.00 mm +/-0.3 mm	
P1	16.00 mm +/-0.1 mm	
Orientation	F2	
Reference Application Note ANI-019 for orientation		

# MAPD-011026



3-Way 0° Power Divider 5 - 300 MHz

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