

2 Way 0° Power Divider 5 - 1600 MHz

Rev. V3

#### **Features**

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

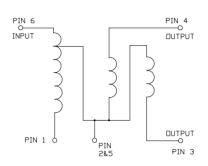
### **Ordering Information**

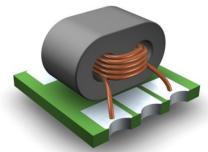
Part Number	Description		
MAPD-011002	Tape & Reel		
MAPD-011002-TB	Customer Evaluation Board		

**Tape & Reel Information** 

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Parameter	Units	Value			
Qty per reel	-	2000			
Reel Size	mm	330			
Tape Width	mm	12.00			
Pitch	mm	8.00			
Ao	mm	4.60			
Во	mm	4.60			
Ko	mm	3.30			
Orientation	-	F18			
Reference Application Note ANI-019 for orientation					

#### **Functional Schematic**





## Pin Configuration<sup>3</sup>

	Function	
1	Ground	
2	External 0.5pF Capacitor	
3	Output 2	
4	Output 1	
5	External 0.5pF Capacitor	
6	Input	

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

# MAPD-011002



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

Parameter	Conditions	Units	Min	Тур	Max
Insertion Loss 1 (pin6-pin4)	5 - 500 MHz 500 - 1600 MHz	dB dB	-	0.3 1.2	0.5 1.7
Insertion Loss 2 (pin6-pin3)	5 - 500 MHz 500 - 1200 MHz 1200 - 1600 MHz	dB dB dB	- - -	0.5 1.1 2.0	0.7 1.4 2.7
Amplitude Balance	5 - 500 MHz 500 - 1200 MHz 1200 - 1600 MHz	dB dB dB	- - -	0.2 0.3 0.7	±0.3 ±0.6 ±1.3
Phase Balance	5 - 870 MHz 870 - 1600 MHz	0	-	0.7 2.3	±1.0 ±5.5
Input Return Loss (pin6)	5 - 500 MHz 500 - 1000 MHz 1000 - 1600 MHz	dB dB dB	20 15 9	26 17 12	1 1 1
Output Return Loss 1 (pin4)	5 - 870 MHz 870 - 1600 MHz	dB dB	20 12	24 16	-
Output Return Loss 2 (pin3)	5 - 500 MHz 500 - 1000 MHz 1000 - 1600 MHz	dB dB dB	20 15 11	25 19 13	- - -
Isolation (pin4-pin3)	5 - 300 MHz 300 - 1200MHz 1200 - 1600 MHz	dB dB dB	30 23 20	34 30 27	- - -

Parameter	Units	Min	Max
Input Power	W		1
Internal Load Dissipation	W		0.125
Operating Temperature Range	°C	-40	+85

#### **Handling Procedures**

Please observe the following precautions to avoid damage:

#### **Static Sensitivity**

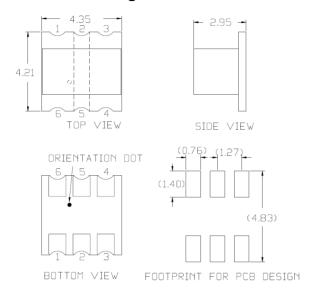
These electronic devices are sensitive to electrostatic discharge (ESD) and can be damaged by static electricity. Proper ESD control techniques should be used when handling these devices.



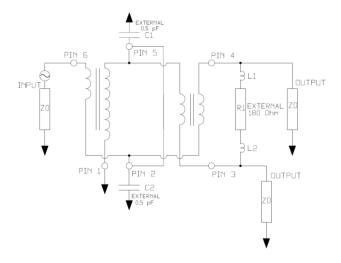
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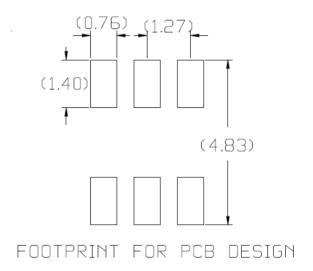
### **Outline Drawing**



### **Application Circuit**



## **Recommended Footprint**

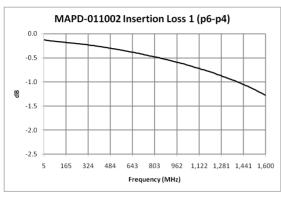


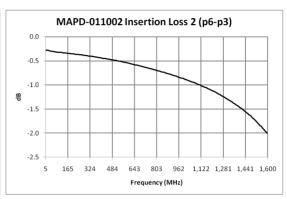


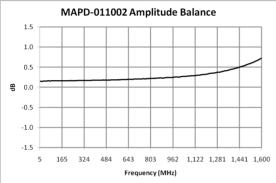
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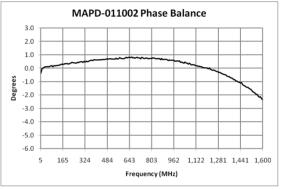
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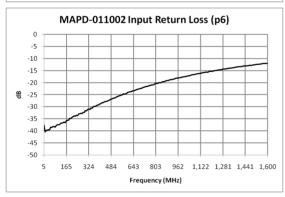
Electrical Specifications:  $Z_0 = 75\Omega$ ,  $T_A = 25$ °C,  $P_{in} = 0$ dBm

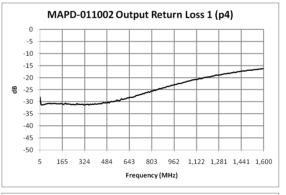


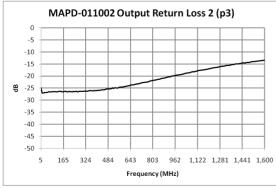


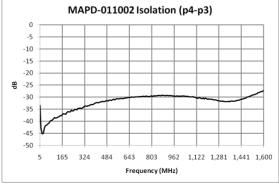












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