

## E-Series RF 2-Way 0° Power Divider 5-1000 MHz

Rev. V3

### Features

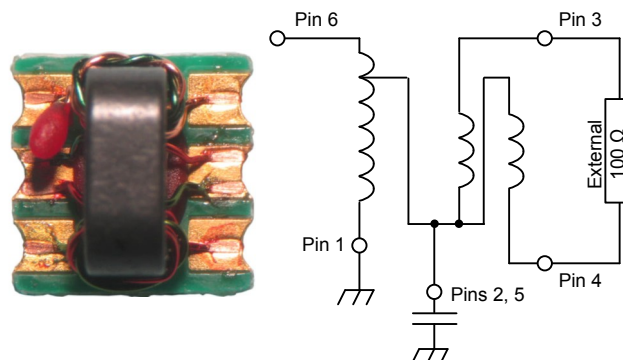
- 2-Way 0 Degree
- Surface Mount
- Tape and Reel Packaging Available
- 260°C Reflow Compatible
- RoHS Compliant
- Pb Free

### Description

The MAPD-009278-5T1000 is a RoHS compliant 2-way 0 degree RF power divider in a low cost, surface mount package. Ideally suit for 50  $\Omega$  system. Two 1.5 pF capacitors and one 100  $\Omega$  resistor are required with this part.

The MAPD-009278-5T1000 is available in a SM-156 surface mount package and is designed to be utilized in both RoHS and standard reflow profiles. Parts are packaged in tape & reel.

### Functional Schematic



### Pin Configuration

Pin No.	Function
1	Ground
2, 5	External 1.5 pF Cap
3	Output Port 1
4	Output Port 2
6	Input

### Electrical Specifications: RF Freq. = 5 - 1000 MHz, $T_A = +25^\circ\text{C}$ , $Z_0 = 50 \Omega$ , $P_{IN} = 0 \text{ dBm}$

Parameter	Test Conditions	Units	Min.	Typ.	Max.
Insertion Loss	Above 3dB	dB	—	—	1.4
Amplitude Imbalance	—	dB	—	—	$\pm 0.6$
Phase Imbalance	—	Degrees	—	—	$\pm 4$
Input Return Loss	—	dB	16	19	—
Output Return Loss	—	dB	16	25	—
Isolation	—	dB	16	20	—

### Ordering Information

Part Number	Package
MAPD-009278-5T1000	2000 piece Reel

### Absolute Maximum Ratings<sup>1,2</sup>

Parameter	Absolute Maximum
RF Power	250 mW
DC Current	240 mA
Operating Temperature	$-40^\circ\text{C}$ to $+85^\circ\text{C}$
Storage Temperature	$-55^\circ\text{C}$ to $+125^\circ\text{C}$

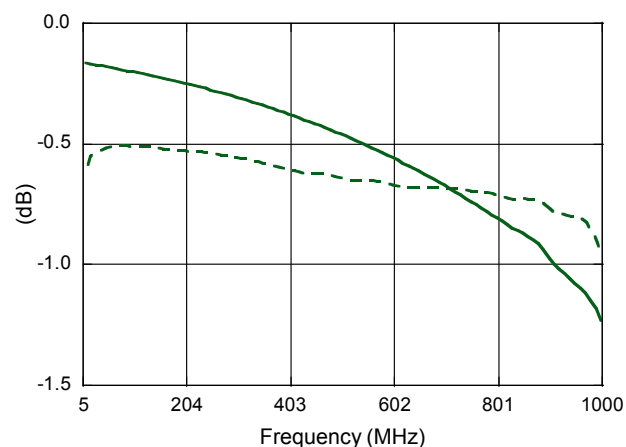
1. Exceeding any one or combination of these limits may cause permanent damage to this device.
2. MACOM does not recommend sustained operation near these survivability limits.

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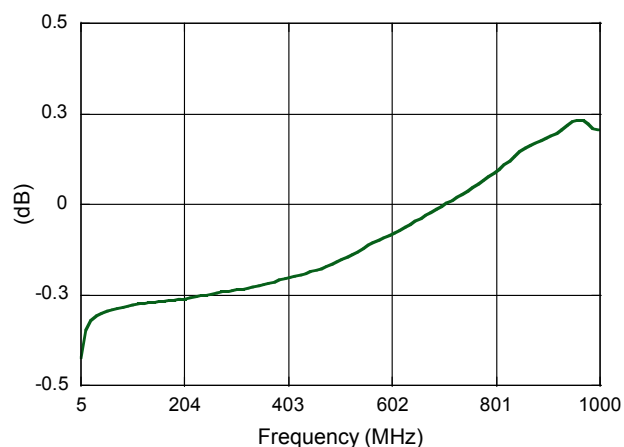
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### Typical Performance Curves

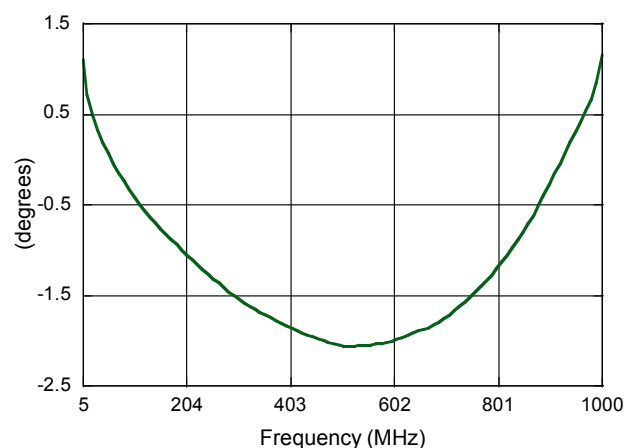
**Insertion Loss**



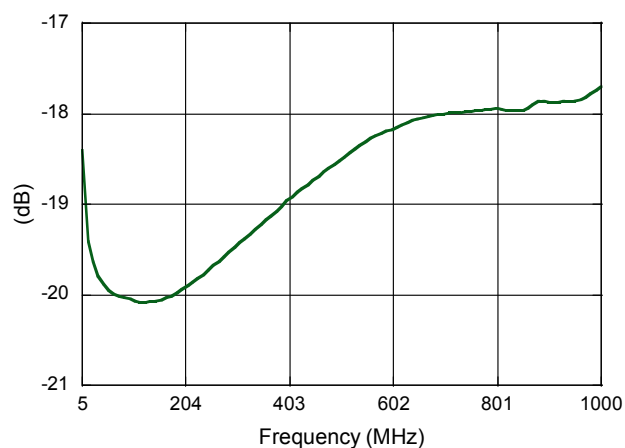
**Amplitude Balance**



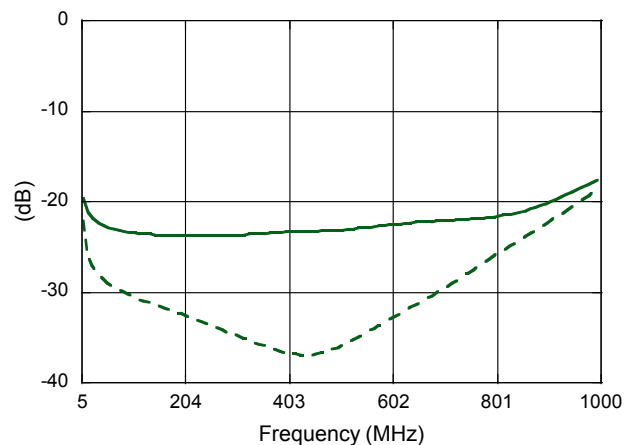
**Phase Balance**



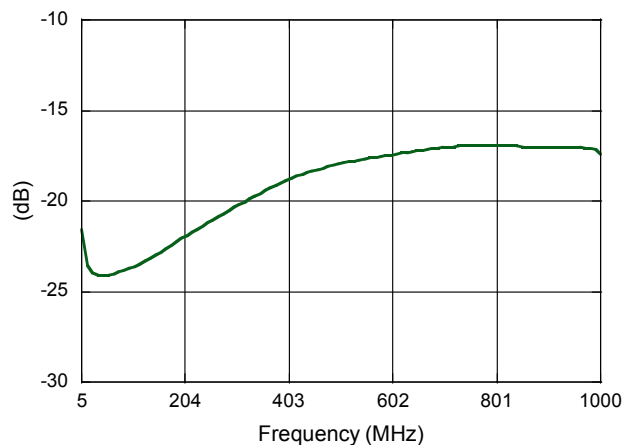
**Input Return Loss**



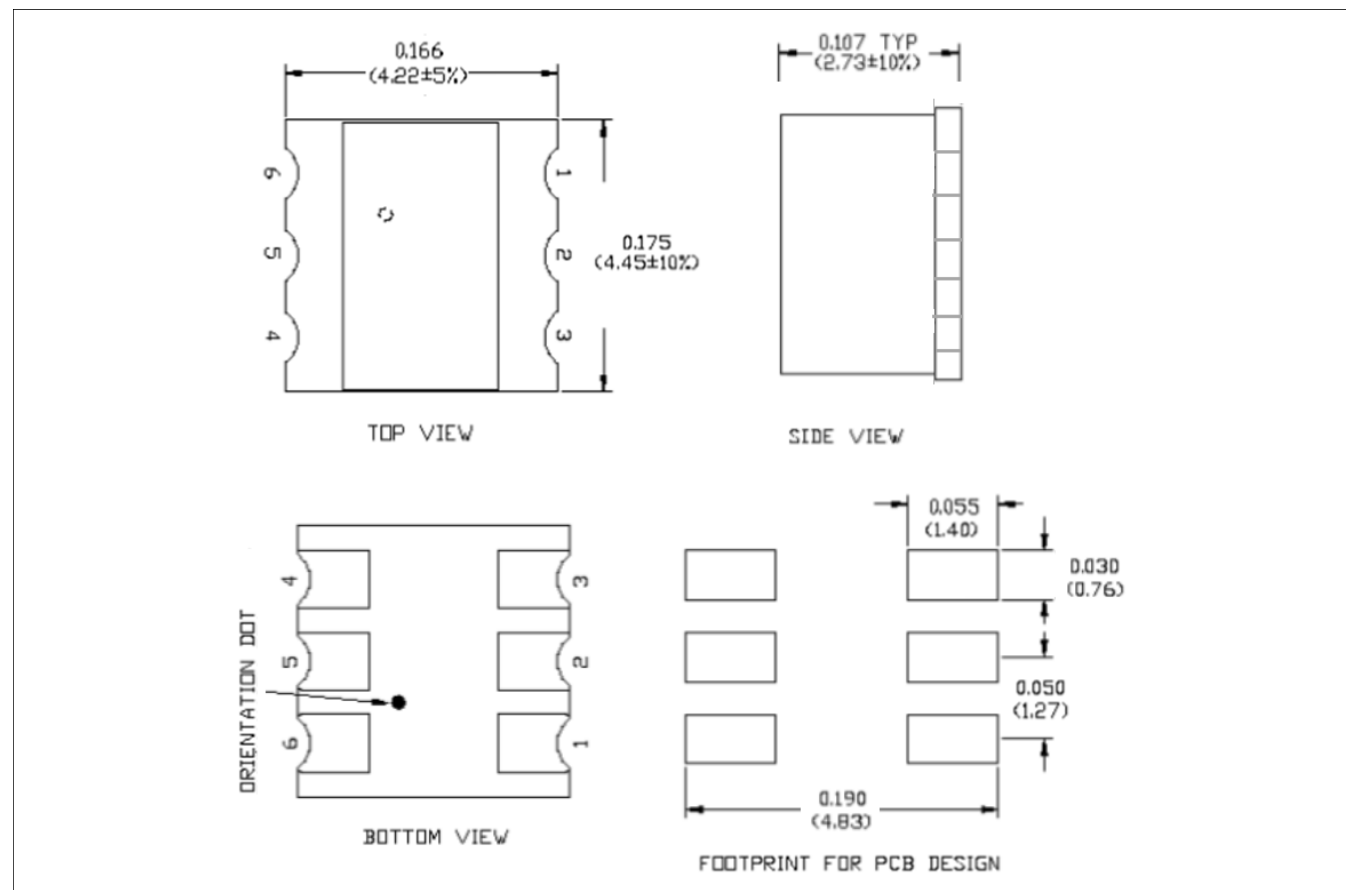
**Output Return Loss**



**Isolation**



## Outline Drawing



Unless Otherwise specified dimensions in inches [mm]  
Tolerance: x.xx ± 0.02, x.xxx ± 0.010

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