

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

Rev. V3

Features

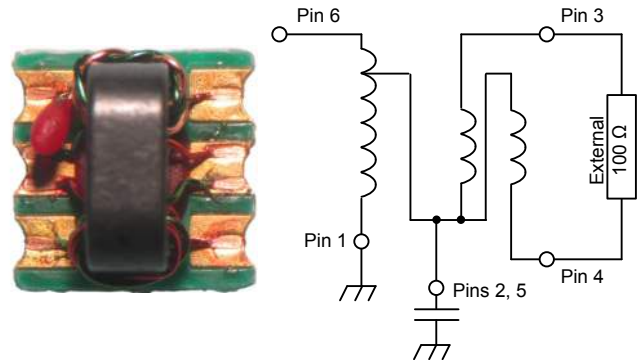
- 2-Way 0 Degree
- Surface Mount
- Tape and Reel Packaging Available
- 260°C Reflow Compatible
- RoHS Compliant
- Pb Free

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 Ω system. Two 1.5 pF capacitors and one 100 Ω 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	—	—	±0.6
Phase Imbalance	—	Degrees	—	—	±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

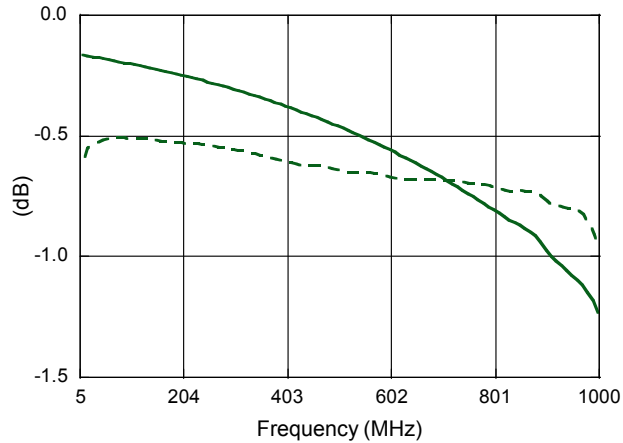
Absolute Maximum Ratings^{1,2}

Parameter	Absolute Maximum
RF Power	250 mW
DC Current	240 mA
Operating Temperature	-40°C to +85°C
Storage Temperature	-55°C to +125°C

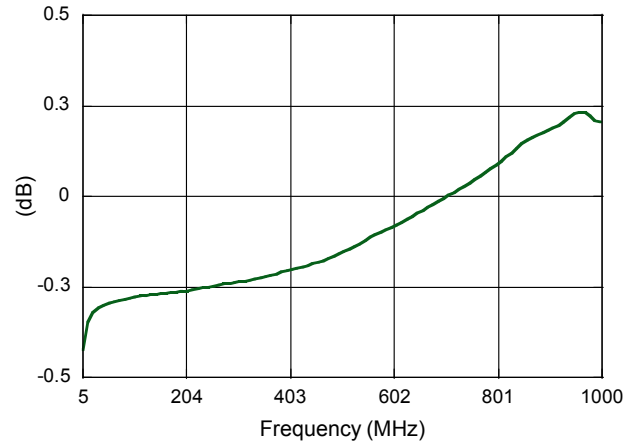
1. Exceeding any one or combination of these limits may cause permanent damage to this device.
2. MACOM does not recommend sustained operation near these survivability limits.

Typical Performance Curves

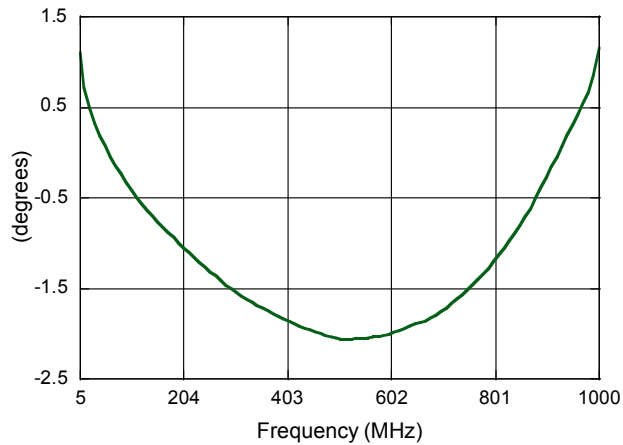
Insertion Loss



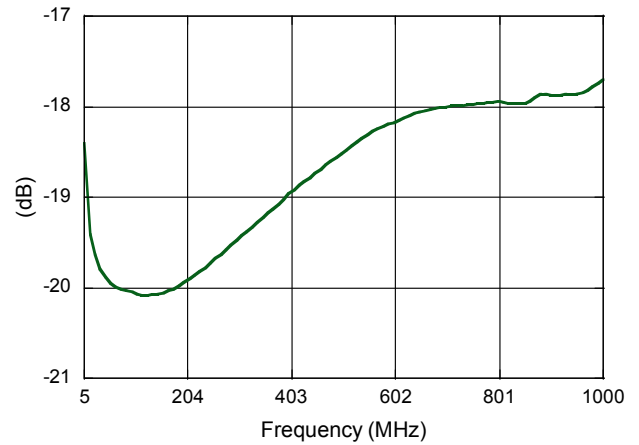
Amplitude Balance



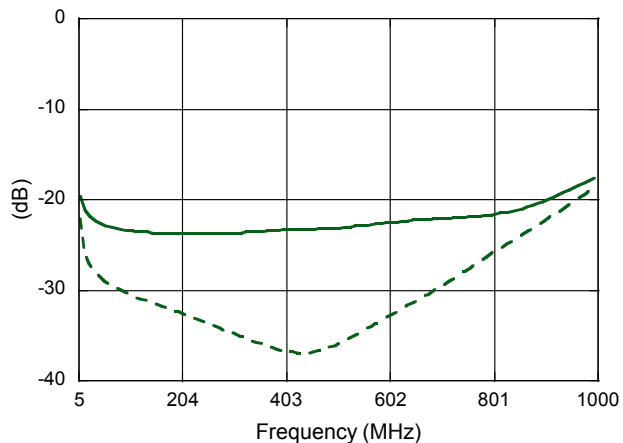
Phase Balance



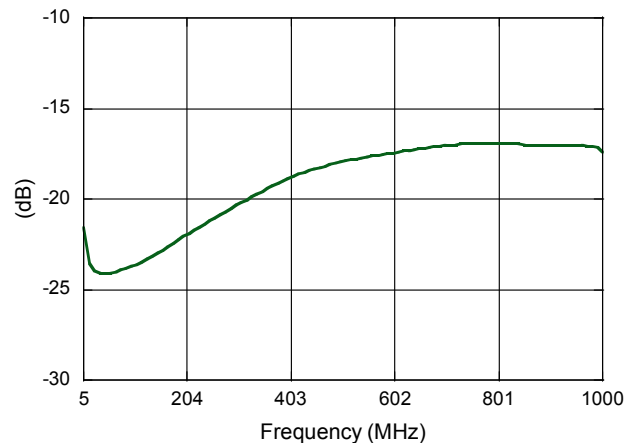
Input Return Loss



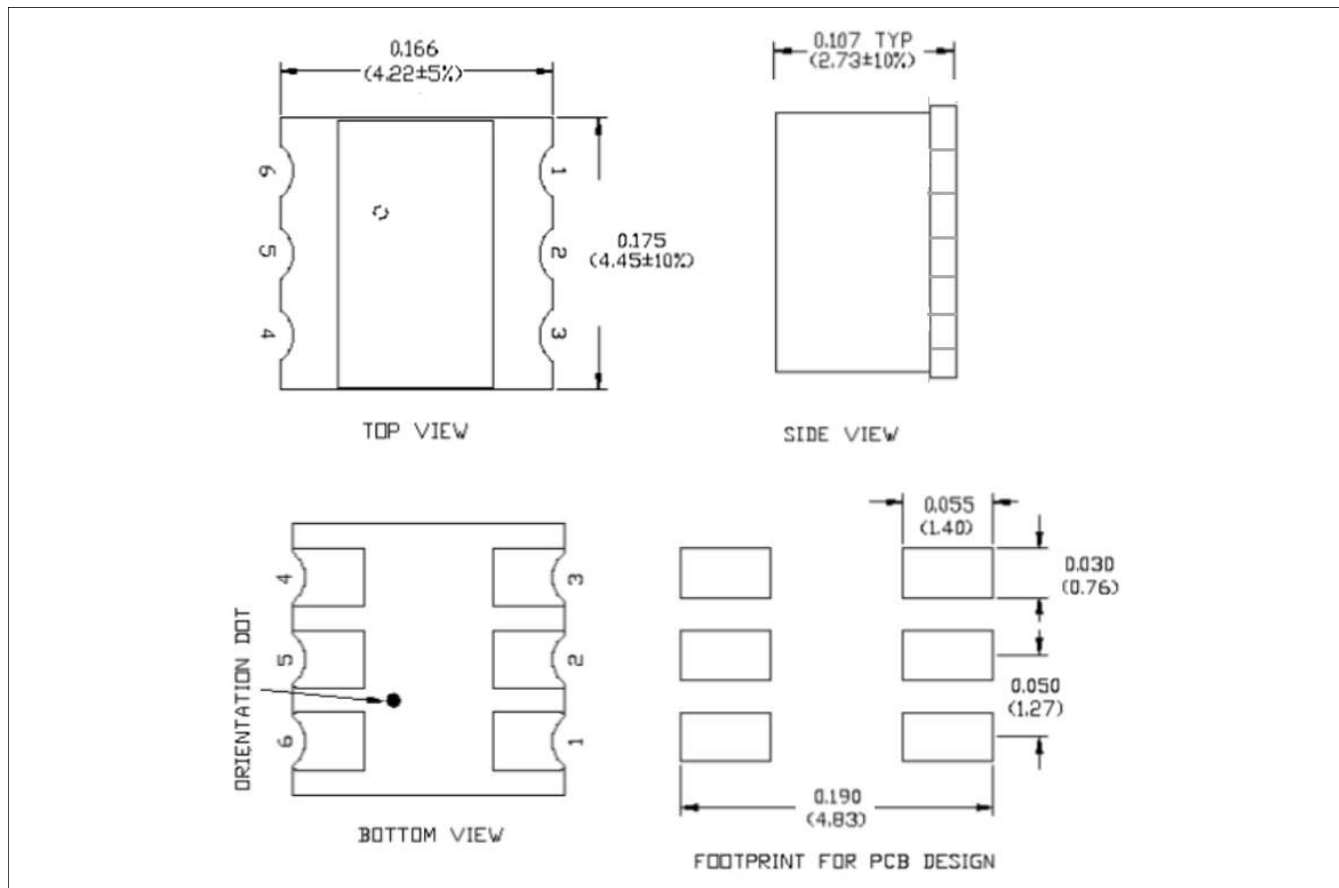
Output Return Loss



Isolation



Outline Drawing



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

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