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

Features

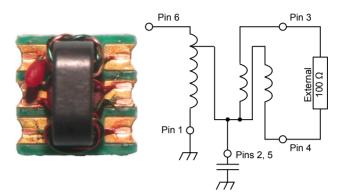
- 2-Way 0 Degree
- Surface Mount
- Tape and Reel Packaging Available
- 260°C Reflow Compatible
- RoHS Compliant
- Pb Free

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, $T_A = +25^{\circ}C$, $Z_0 = 50 \Omega$, $P_{IN} = 0 \text{ dBm}$

Parameter	Test Conditions	Units	Min.	Тур.	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	e -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.

 MACOM does not recommend sustained operation near these survivability limits.

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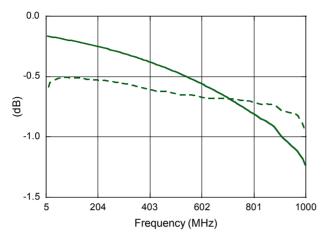


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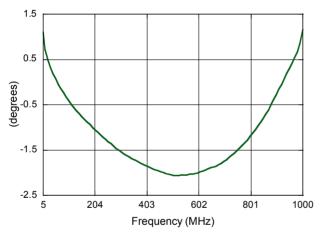
E-Series RF 2-Way 0° Power Divider 5-1000 MHz

Typical Performance Curves

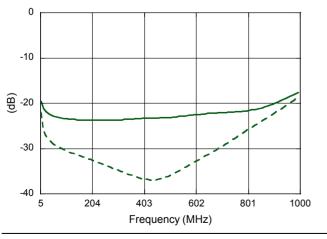
Insertion Loss



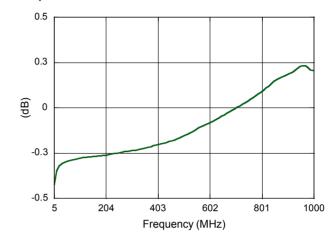
Phase Balance



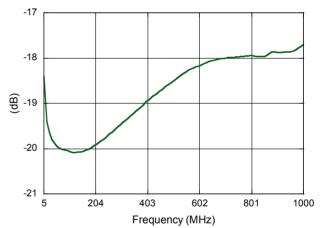




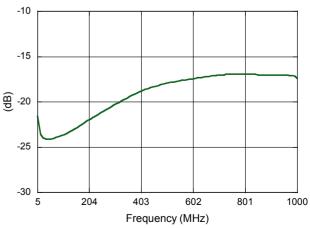
Amplitude Balance



Input Return Loss







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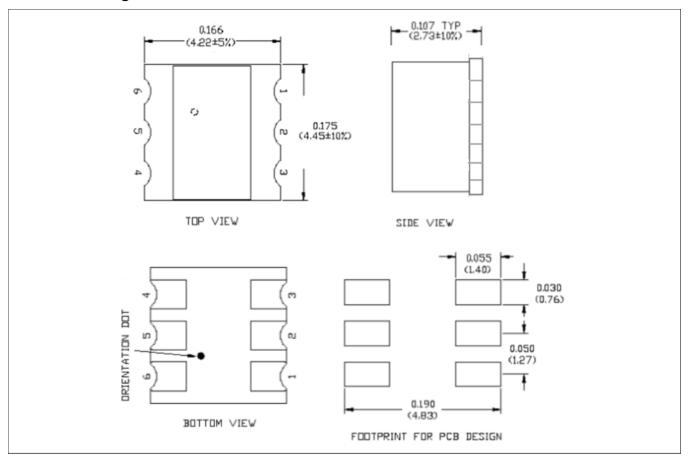




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E-Series RF 2-Way 0° Power Divider 5-1000 MHz

Outline Drawing



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

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