## E-Series RF 2-Way $0^{\circ}$ Power Divider 5-1000 MHZ

## Features

- 2-Way 0 Degree
- Surface Mount
- Tape and reel packaging available
- $260^{\circ} \mathrm{C}$ Reflow Compatible
- RoHS* compliant


## Description

M/A-COM's 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 Ohm system. Two 1.5 pF capacitors and one 1000 hm 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.
and standard reflow profles. Parts are packaged in tape \& reel.

## Product Image

- Rev. V2



## Ordering Information

| Part Number | Package |
| :---: | :---: |
| MAPD-009278-5T1000 | Tape and Reel (2000 piece Reel) |

Electrical Specifications: $\mathrm{T}_{\mathrm{A}}=\mathbf{2 5}^{\circ} \mathrm{C}, \mathrm{Z}_{\mathbf{0}}=50 \Omega$

| Parameter | Test Conditions | Frequency | Units | Min | Typ | Max |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| RF Frequency | - | $5-1000$ | MHz | - | - | - |
| Insertion Loss | Above 3dB | $5-1000$ | dB | - | - | 1.4 |
| Amplitude Imbalance | - | $5-1000$ | dB | - | - | 0.6 |
| Phase Imbalance | - | $5-1000$ | Degrees | - | - | 4 |
| Input Return Loss | - | $5-1000$ | dB | - | 19 | 16.0 |
| Output Return Loss | - | $5-1000$ | dB | - | 25 | 16.0 |
| Isolation | - | $5-1000$ | dB | - | 20 | 16.0 |

Pin Configuration

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

## Absolute Maximum Ratings

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

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

* Restrictions on Hazardous Substances, European Union Directive 2002/95/EC.

Schematic With Off Chip Components


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MA-COM Products

- Rev. V2


## Typical Performance Curves at $\mathbf{+ 2 5}{ }^{\circ} \mathrm{C}$

Insertion Loss


Amplitude Balance


## Phase Balance



Input Return Loss


## SM -156 Package



SIDE VIEW

bottom viev


Unless otherwise specified dimensions in inches [ mm ] Tolerance: . $x x \pm .02, . x x x \pm .010$

Isolation


Output Return Loss


- North America Tel: 800.366.2266 • Europe Tel: +353.21.244.6400
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