E-Series 2-Way $90^{\circ}$ Power Divider<br>112-168 MHz

M/A-COM Products

## Features

## Product Image

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


## Description

M/A-COM's MAPD-009850-HW1268 is a RoHS Compliant 2-way $90^{\circ}$ power divider in a low cost, surface mount package. Ideally suited for high volume cellular, wireless applications.
The MAPD-009850-HW1268 is available in a SM-89 surface mount package and is designed to be utilized in both RoHS and standard reflow profiles. Parts are packaged in tape \& reel.


## Ordering Information

| Part Number | Package |
| :---: | :---: |
| MAPD-009850-HW1268 | Tape and Reel (900 piece Reel) |

Electrical Specifications: $\mathrm{T}_{\mathrm{A}}=25^{\circ} \mathrm{C}, \mathrm{Z}_{0}=50 \Omega$

| Frequency Range | Test Conditions | Units | Min. | Typ. | Max. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Insertion Loss | $112-168 \mathrm{MHz}$ | dB | - | 0.5 | 1.2 |
| Isolation | $112-168 \mathrm{MHz}$ | dB | 18 | 23 | - |
| Amplitude Unbalance | $112-168 \mathrm{MHz}$ | dB | - | 1.0 | 2.0 |
| Phase Unbalance | $112-168 \mathrm{MHz}$ | 0 | - | $1^{\circ}$ | $2^{\circ}$ |
| Input Return Loss | $112-168 \mathrm{MHz}$ | dB | 20 | 24 | - |

## Absolute Maximum Ratings ${ }^{1,2}$

| Parameter | Absolute Maximum |
| :---: | :---: |
| Impedance | 50 Ohms nominal |
| RF Power | 1 Watt |
| Internal Load Dissipation | 0.125 Watt |
| Operating Temperature | $-40^{\circ} \mathrm{C}$ to $+85^{\circ} \mathrm{C}$ |
| Storage Temperature | $-55^{\circ} \mathrm{C}$ to $+125^{\circ} \mathrm{C}$ |

## Pin Configuration

| Pin No. | Function |
| :---: | :---: |
| Input | 1 |
| Port 1 | 4 |
| Port 2 | 6 |
| External 50 Ohms | 3 |
| Not Connected | 2,5 |

1. Exceeding any one or combination of these limits may cause permanent damage to this device.
2. $\mathrm{M} / \mathrm{A}-\mathrm{COM}$ does not recommend sustained operation near these survivability limits.
[^0]
## Typical Performance Curves

## Insertion Loss Port 1



Amplitude Unbalance


Isolation


## SM - 89 Package



## Phase Unbalance



## Input Return Loss



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- Europe Tel: 44.1908.574.200 / Fax: 44.1908.574.300
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[^0]:    * Restrictions on Hazardous Substances, European Union Directive 2002/95/EC.

    ADVANCED: Data Sheets contain information regarding a product M/A-COM is considering for development. Performance is based on target specifications, simulated results, and/or prototype measurements. Commitment to develop is not guaranteed.

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