## E-Series 4-Way $0^{\circ}$ Power Divider 5 - 1000 MHz

## Features

- 4 Way
- 0 Degree
- Surface Mount Package
- Available on Tape and Reel



## Description

M/A-COM's ESJ-4-2-75 is a Low Cost, Broadband, high performance Power Divider for use in high volume CATV applications. ESJ-4-2-75 is available in an SM-46 surface mount package and reflows using standard soldering reflow profiles.

## SM-46 Package



Electrical Specifications @ +25 ${ }^{\circ} \mathrm{C}$

| Parameter |  | Units | Minimum | Typical | Maximum |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Frequency Range | 5-1000 | MHz | - | - | - |
| Insertion Loss | $\begin{aligned} & 5-80 \mathrm{MHz} \\ & 50-500 \mathrm{MHz} \\ & 500-1000 \mathrm{MHz} \end{aligned}$ | dB <br> dB <br> dB | — | $\begin{aligned} & \hline 0.6 \\ & 0.8 \\ & 1.0 \end{aligned}$ | $\begin{aligned} & 1.0 \\ & 1.3 \\ & 1.5 \end{aligned}$ |
| Isolation | $\begin{aligned} & 5-80 \mathrm{MHz} \\ & 50-500 \mathrm{MHz} \\ & 500-1000 \mathrm{MHz} \end{aligned}$ | $\begin{aligned} & \mathrm{dB} \\ & \mathrm{~dB} \\ & \mathrm{~dB} \end{aligned}$ | $\begin{aligned} & 20 \\ & 20 \\ & 20 \end{aligned}$ | - | — |
| Amplitude Unbalance | $\begin{aligned} & 5-80 \mathrm{MHz} \\ & 80-1000 \mathrm{MHz} \end{aligned}$ | $\begin{aligned} & \mathrm{dB} \\ & \mathrm{~dB} \end{aligned}$ | — | $\begin{aligned} & 0.1 \\ & 0.3 \end{aligned}$ | $\begin{aligned} & 0.3 \\ & 0.5 \end{aligned}$ |
| Phase Unbalance | $\begin{aligned} & 5-80 \mathrm{MHz} \\ & 80-500 \mathrm{MHz} \\ & 500-1000 \mathrm{MHz} \end{aligned}$ |  | - | $0.1$ | $\begin{aligned} & 1^{\circ} \\ & 3^{\circ} \\ & 6^{\circ} \end{aligned}$ |
| Input Return Loss | $\begin{aligned} & 5-80 \mathrm{MHz} \\ & 80-1000 \mathrm{MHz} \end{aligned}$ | $\begin{aligned} & \mathrm{dB} \\ & \mathrm{~dB} \end{aligned}$ | $\begin{aligned} & 21 \\ & 18 \end{aligned}$ | $\begin{aligned} & 25 \\ & 21 \end{aligned}$ | - |
| Output Return Loss | $5-1000 \mathrm{MHz}$ | dB | 16 | 19 | - |

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## Absolute Maximum Ratings

| Parameter | Absolute Maximum |
| :---: | :---: |
| Maximum Power Rating | 1 Watt |
| Internal Load Dissipation | 0.125 Watt |
| Pin Temperature (10 Sec) | $260^{\circ} \mathrm{C}$ |
| Storage Temperature | $-55^{\circ} \mathrm{C}$ to $+100^{\circ} \mathrm{C}$ |
| Operating Temperature | $-20^{\circ} \mathrm{C}$ to $+85^{\circ} \mathrm{C}$ |

## Functional Configuration

| Function | Pin No. |
| :---: | :---: |
| Not Connected | - |
| External 75 Ohms | - |
| Ground | $1,5,7$ |
| Case Ground | - |
| Input | 3 |
| Port 1 | 2 |
| Port 2 | 4 |
| Port 3 | 6 |
| Port 4 | 8 |



## Phase Unbalance

 information.


[^0]:    ADVANCED: Data Sheets contain information regarding a product M/A-COM Technology Solutions is considering for development. Performance is based on target specifications, simulated results, and/or prototype measurements. Commitment to develop is not guaranteed.
    PRELIMINARY: Data Sheets contain information regarding a product M/A-COM Technology Solutions has under development. Performance is based on engineering tests. Specifications are typical. Mechanical outline has been fixed. Engineering samples and/or test data may be available. Commitment to produce in volume is not guaranteed.

