## E-Series 2-Way $0^{\circ}$ Power Divider 5-900 MHz

## Features

- 2 Way
- 0 Degree
- Surface Mount



## Description

M/A-COM's ESSM-2-6 is a 2 Way $0^{\circ}$ Power Divider in a low cost, surface mount package. Ideally suited for high volume cellular and wireless applications.

## SM-1 Package



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

| Parameter |  | Units | Typical | Minimum | Maximum |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Frequency Range | 5-900 | MHz | - | - | - |
| Insertion Loss | $\begin{aligned} & 5-50 \mathrm{MHz} \\ & 50-450 \mathrm{MHz} \\ & 450-900 \mathrm{MHz} \end{aligned}$ | dB <br> dB <br> dB | $\begin{aligned} & 0.2 \\ & 0.4 \\ & 0.7 \end{aligned}$ | $\begin{aligned} & - \\ & - \end{aligned}$ | $\begin{aligned} & 0.4 \\ & 0.7 \\ & 1.2 \end{aligned}$ |
| Isolation | $\begin{aligned} & 5-50 \mathrm{MHz} \\ & 5-450 \mathrm{MHz} \end{aligned}$ | $\begin{aligned} & \mathrm{dB} \\ & \mathrm{~dB} \end{aligned}$ | $\begin{aligned} & 28 \\ & 28 \end{aligned}$ | $\begin{aligned} & 20 \\ & 20 \end{aligned}$ | - |
| Amplitude Unbalance | $\begin{aligned} & 5-50 \mathrm{MHz} \\ & 50-450 \mathrm{MHz} \end{aligned}$ | $\mathrm{dB}$ $\mathrm{dB}$ | - | - | $\begin{aligned} & 0.2 \\ & 0.3 \end{aligned}$ |
| Phase Unbalance | $\begin{aligned} & 5-50 \mathrm{MHz} \\ & 50-450 \mathrm{MHz} \end{aligned}$ | o | - | - | $\begin{aligned} & 2.0^{\circ} \\ & 3.0^{\circ} \end{aligned}$ |
| Input \& Output Return Loss | $5-900 \mathrm{MHz}$ | dB | 25 | 16 | - |

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.

- North America Tel: 800.366.2266 • Europe Tel: +353.21.244.6400
- India Tel: +91.80.4155721 • China Tel: +86.21.2407.1588

Visit www.macomtech.com for additional data sheets and product information.

## Absolute Maximum Ratings

| Parameter | Absolute Maximum |
| :---: | :---: |
| Maximum Power Rating | 1 Watt |
| Internal Load Dissipation | 0.125 Watt |
| Pin Temp (10 Sec) | $260^{\circ} \mathrm{C}$ |
| Storage Temperature | $-55^{\circ} \mathrm{C}$ to $100^{\circ} \mathrm{C}$ |
| Operating Temperature | $-40^{\circ} \mathrm{C}$ to $85^{\circ} \mathrm{C}$ |

## Typical Performance @ +25 ${ }^{\circ} \mathrm{C}$

## Insertion Loss




Output Return Loss


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

## Functional Configuration

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

Isolation


Phase Unbalance


Input Return Loss


V2.00 S 0862 F

- North America Tel: 800.366.2266 • Europe Tel: +353.21.244.6400
- India Tel: +91.80.4155721 - China Tel: +86.21.2407.1588

Visit www.macomtech.com for additional data sheets and product information.

