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

MACPES0007

## Features

- 2 Way
- 0 Degree
- Surface Mount


## Description



M/A-COM's MACPES0007 is a 2 Way $0^{\circ}$ Power Divider in a low cost, surface mount package. Ideally suited for high volume cellular and wireless and CATV applications. An external 160 Ohm chip resistor is required with this part.


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

| Parameter |  | Units | Typical | Minimum | Maximum |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Frequency Range | 5-1000 | MHz | - | - | - |
| Insertion Loss | $\begin{aligned} & 5-40 \mathrm{MHz} \\ & 40-400 \mathrm{MHz} \\ & 400-500 \mathrm{MHz} \\ & 500-1000 \mathrm{MHz} \end{aligned}$ | $\begin{aligned} & \mathrm{dB} \\ & \mathrm{~dB} \\ & \mathrm{~dB} \\ & \mathrm{~dB} \end{aligned}$ | $\begin{aligned} & 0.6 \\ & 0.6 \\ & 0.8 \\ & 0.8 \end{aligned}$ | $\begin{aligned} & - \\ & - \\ & - \end{aligned}$ | $\begin{aligned} & 1.0 \\ & 0.7 \\ & 0.7 \\ & 1.0 \end{aligned}$ |
| Isolation | $\begin{aligned} & 5-40 \mathrm{MHz} \\ & 40-400 \mathrm{MHz} \\ & 400-500 \mathrm{MHz} \\ & 500-1000 \mathrm{MHz} \end{aligned}$ | dB <br> dB <br> dB <br> dB | $\begin{aligned} & 26 \\ & 26 \\ & 21 \\ & 17 \end{aligned}$ | $\begin{aligned} & 19 \\ & 19 \\ & 16 \\ & 10 \end{aligned}$ | $\begin{aligned} & - \\ & - \\ & - \end{aligned}$ |
| Amplitude Unbalance | $\begin{aligned} & 5-40 \mathrm{MHz} \\ & 40-400 \mathrm{MHz} \\ & 400-500 \mathrm{MHz} \\ & 500-1000 \mathrm{MHz} \end{aligned}$ | $\begin{aligned} & \mathrm{dB} \\ & \mathrm{~dB} \\ & \mathrm{~dB} \\ & \mathrm{~dB} \end{aligned}$ | $\begin{aligned} & - \\ & - \\ & - \end{aligned}$ |  | $\begin{aligned} & 0.6 \\ & 0.4 \\ & 0.6 \\ & 0.6 \end{aligned}$ |
| Phase Unbalance | $\begin{aligned} & 5-40 \mathrm{MHz} \\ & 40-400 \mathrm{MHz} \\ & 400-500 \mathrm{MHz} \\ & 500-1000 \mathrm{MHz} \end{aligned}$ | o | - | — | $\begin{aligned} & 3.0^{\circ} \\ & 3.0^{\circ} \\ & 3.0^{\circ} \\ & 5.0^{\circ} \\ & \hline \end{aligned}$ |
| Output Return Loss | $\begin{aligned} & 5-40 \mathrm{MHz} \\ & 40-870 \mathrm{MHz} \\ & 40-1000 \mathrm{MHz} \\ & \hline \end{aligned}$ | dB <br> dB <br> dB | $\begin{aligned} & 20 \\ & 24 \\ & 24 \end{aligned}$ | $\begin{aligned} & 14 \\ & 16 \\ & 16 \end{aligned}$ | - |
| Input Return Loss | $\begin{aligned} & 5-40 \mathrm{MHz} \\ & 40-870 \mathrm{MHz} \\ & 40-1000 \mathrm{MHz} \\ & \hline \end{aligned}$ | $\begin{aligned} & \mathrm{dB} \\ & \mathrm{~dB} \\ & \mathrm{~dB} \end{aligned}$ | $\begin{aligned} & 20 \\ & 22 \\ & 22 \end{aligned}$ | $\begin{aligned} & 15 \\ & 17 \\ & 16 \end{aligned}$ | - |

- North America Tel: 800.366.2266 • Europe Tel: +358158.944.6400
- India Tel: +91.80.4155721 • China Tel: +86.21.2407.1588 Visit www.macomtech.com for additional data sheets and product informa-


## MACPES0007

## 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 $100^{\circ} \mathrm{C}$ |

## Functional Configuration

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

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

Insertion Loss


## Amplitude Unbalance



[^0]
## Isolation



Phase Unbalance



[^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.

