## Two-Way Power Dividers, <br> 1-100 MHz and 40-400 MHz

## Features

- Ideal for High Density Packaging
- High Isolation: 30 dB Min.
- VSWR: 1.3:1 Max.
- Impedance: 50 Ohms Nominal
- Maximum Power Rating or Input Power: 1 Watt Max.
- Internal Load Dissipation: 0.05 Watts Max.
- MIL-STD-883 Screening Available


## Description

A Power Divider is ideally a lossless reciprocal device which can also perform vector summation of two or more signals and thus is sometimes called a power combiner or summer.

## Pin Configuration

| Pin No. | Function | Pin No. | Function |
| :---: | :---: | :---: | :---: |
| A | Out | C | Out |
| B | In |  |  |

TO-5-1


## MTH-50 Electrical Specifications ${ }^{1}$ : $\mathrm{T}_{\mathrm{A}}=-55^{\circ} \mathrm{C}$ to $+85^{\circ} \mathrm{C}$

| Parameter | Test Conditions | Frequency | Units | Min | Typ | Max |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Frequency | - | $1-100$ | MHz | - | - | - |
| Insertion Loss | Less Coupling | - | $1-100 \mathrm{MHz}$ | dB | - | - |
| Isolation | - | $1-100 \mathrm{MHz}$ | dB | 30 | - | - |
| Amplitude Balance | - | $1-100 \mathrm{MHz}$ | dB | - | - | 0.5 |
| Phase Balance | - | $1-100 \mathrm{MHz}$ | $\circ$ | - | - | 1.0 |
| VSWR | - | $1-100 \mathrm{MHz}$ | Ratio | - | - | $1.3: 1$ |

## MTV-50 Electrical Specifications ${ }^{1}$ : $\mathrm{T}_{\mathrm{A}}=-55^{\circ} \mathrm{C}$ to $+85^{\circ} \mathrm{C}$

| Parameter | Test Conditions | Frequency | Units | Min | Typ | Max |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Frequency | - | $40-400 \mathrm{MHz}$ | MHz | - | - | - |
| Insertion Loss | Less Coupling | - | $40-400 \mathrm{MHz}$ | dB | - | - |
| Isolation | - | $40-400 \mathrm{MHz}$ | dB | 30 | - | - |
| Amplitude Balance | - | $40-400 \mathrm{MHz}$ | dB | - | - | 0.6 |
| Phase Balance | - | $40-400 \mathrm{MHz}$ | $\circ$ | - | - | 2.0 |
| VSWR | - | $40-400 \mathrm{MHz}$ | Ratio | - | - | $1.3: 1$ |

[^0][^1]Visit www.macomtech.com for additional data sheets and product information

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## Typical Performance Curves

Insertion Loss - Ports 2-3, 2-1


## VSWR



Isolation - Ports 1-3


## Ordering Information

| Part Number | Package |
| :---: | :---: |
| MTH-50 PIN | TO-5-1 |
| MTV-50 PIN | TO-5-1 |


[^0]:    1. All specification apply with 50 ohm source and load impedance.
[^1]:    - North America Tel: 800.366.2266
    - Europe Tel: +353.21.244.6400

    India Tel: +91.80.4155721 - China Tel: +86.21.2407.1588

