Three-Way Power Divider, 3 - 700 MHz

Features

- Insertion Loss: 0.4 dB Typical Midband
- Isolation: 28 dB Typical Midband
- Input VSWR: 1.2:1 Typical
- Impedance: 50 Ohms Nominal
- Maximum Power Rating or Input Power: 1 Watt Max.
- Internal Load Dissipation: 0.125 Watts Max.
- MIL-STD-202 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 | |
|---------|----------|------------------|--------|
| 1 | GND | 7 | GND |
| 2 | Output | 8 | Output |
| 3 | GND | 9 | GND |
| 4 | GND | 10 | GND |
| 5 | Output | 11 | Input |
| 6 | GND | 12 | GND |

Electrical Specifications¹: $T_A = -55^{\circ}C$ to $+85^{\circ}C$

| Parameter | Test Conditions | Frequency | Units | Min | Тур | Max |
|-------------------|-----------------|------------------------------|----------------|-----|-----|----------------|
| Insertion Loss | Less Coupling | 3 - 500 MHz 500 - 700 MHz | dB dB | | | 0.70 1.0 |
| Isolation | — | 3 - 700 MHz | dB | 20 | _ | — |
| Amplitude Balance | _ | 3 - 500 MHz 500 - 700 MHz | dB dB | | | 0.25 0.4 |
| Phase Balance | — | 3 - 500 MHz 500 - 700 MHz | 0 0 | — | — | 3 4 |
| VSWR | All Ports | 10 - 500 MHz 3 - 700 MHz | Ratio Ratio | | | 1.3:1 1.5:1 |

1. All specifications apply with 50 ohm source and load impedance.

This product contains elements protected by United States Patent Number 3,428,920.

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

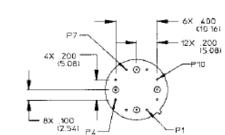
typical. Mechanical outline has been fixed. Engineering samples

Commitment to produce in volume is not gue

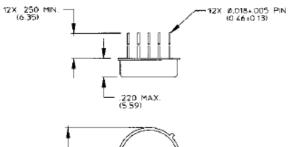
- North America Tel: 800.366.2266
 Europe Tel: +353.21.244.6400
 India Tel: +91.80.4155721
 China Tel: +86.21.2407.1588
- Visit www.macomtech.com for additional data sheets and product information.



Rev. V3



TO-8-2





Bottom of Case is AC Ground Dimensions in 0 are in min Unless Otherwise Noted: XXX = ±0.00 (XXX = ±0.25) XX = ±0.02 (X = ±0.5)

a may be available. M/A-COM Technology Solutions mor and its infiliates reserve the right to make Changes to the product s) ovinformation contained herein without notice.

1

Three-Way Power Divider, 3 - 700 MHz

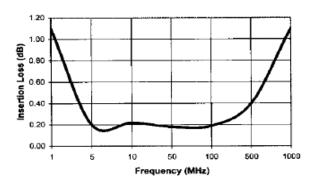


Rev. V3

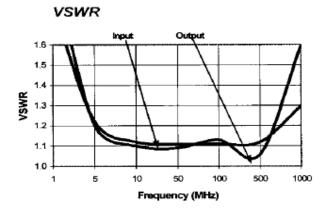
Typical Performance Curves

Insertion Loss

Insertion Loss

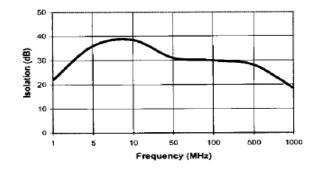


VSWR



Isolation

Isolation



Ordering Information

| Part Number | Package |
|-------------|---------|
| DS-328 PIN | TO-8-2 |

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 more treatment to produce in volume is not guaranteed. Commitment to produce in volume is not guaranteed.