

## Flatpack Four-Way Power Divider, 0.2 - 300 MHz

Rev. V4

### Features

- Insertion Loss: 0.5 dB Typical
- VSWR: 1.1:1 Typical Miband
- Impedance: 50 Ohms Nominal
- Maximum Power Rating or Input Power: 1 Watt Max.
- Internal Load Dissipation: 50 Watts Max.
- MIL-STD-883 Screening Available

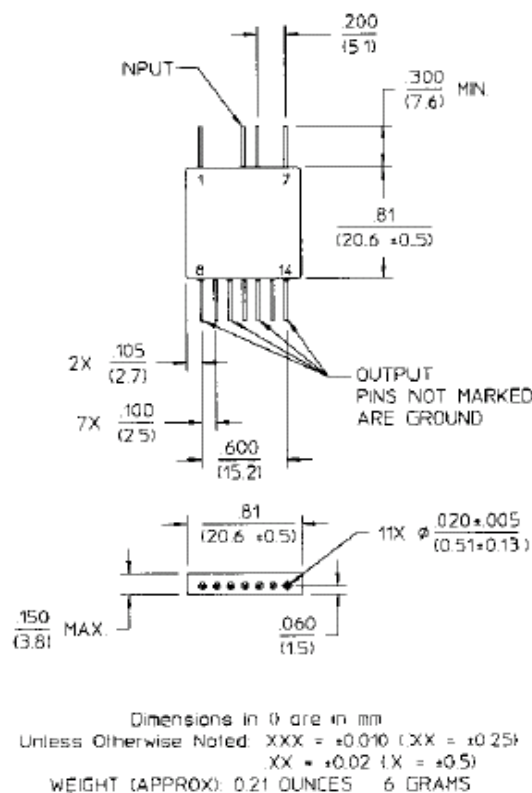
### FP-5

### 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      | 8       | Output   |
| 2       | None     | 9       | GND      |
| 3       | None     | 10      | Output   |
| 4       | Input    | 11      | GND      |
| 5       | GND      | 12      | Output   |
| 6       | None     | 13      | GND      |
| 7       | GND      | 14      | Output   |



### Electrical Specifications<sup>1</sup>: T<sub>A</sub> = -55°C to +85°C

| Parameter         | Test Conditions | Frequency     | Units | Min | Typ | Max   |
|-------------------|-----------------|---------------|-------|-----|-----|-------|
| Insertion Loss    | Less Coupling   | 0.3 - 0.5 MHz | dB    | —   | —   | 1.0   |
|                   |                 | 0.5 - 100 MHz | dB    | —   | —   | 0.5   |
|                   |                 | 100 - 300 MHz | dB    | —   | —   | 1.0   |
| Isolation         | —               | 0.3 - 0.5 MHz | dB    | 20  | —   | —     |
|                   |                 | 0.5 - 100 MHz | dB    | 25  | —   | —     |
|                   |                 | 100 - 300 MHz | dB    | 15  | —   | —     |
| Amplitude Balance | —               | 0.3 - 0.5 MHz | dB    | —   | —   | 0.2   |
|                   |                 | 0.5 - 100 MHz | dB    | —   | —   | 0.2   |
|                   |                 | 100 - 300 MHz | dB    | —   | —   | 0.4   |
| Phase Balance     | —               | 0.3 - 0.5 MHz | °     | —   | —   | 1.5   |
|                   |                 | 0.5 - 100 MHz | °     | —   | —   | 4.0   |
|                   |                 | 100 - 300 MHz | °     | —   | —   | 6.0   |
| VSWR              | All Ports       | 0.3 - 0.5 MHz | Ratio | —   | —   | 2.0:1 |
|                   |                 | 0.5 - 100 MHz | Ratio | —   | —   | 1.3:1 |
|                   |                 | 100 - 300 MHz | Ratio | —   | —   | 1.4:1 |

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.

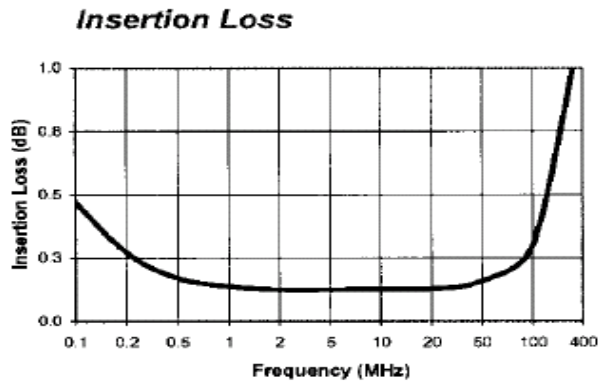
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• **North America** Tel: 800.366.2266 • **Europe** Tel: +353.21.244.6400  
 • **India** Tel: +91.80.4155721 • **China** Tel: +86.21.2407.1588  
 Visit [www.macomtech.com](http://www.macomtech.com) for additional data sheets and product information.

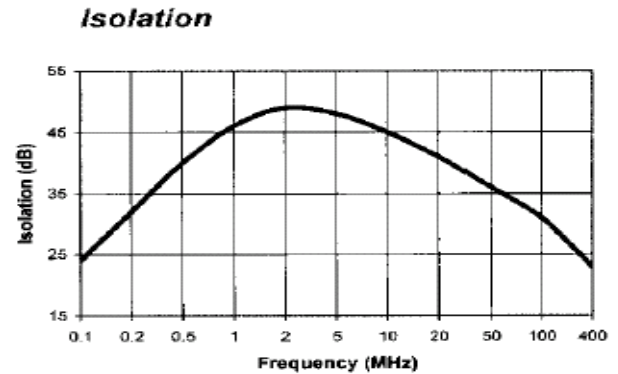
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## Typical Performance Curves

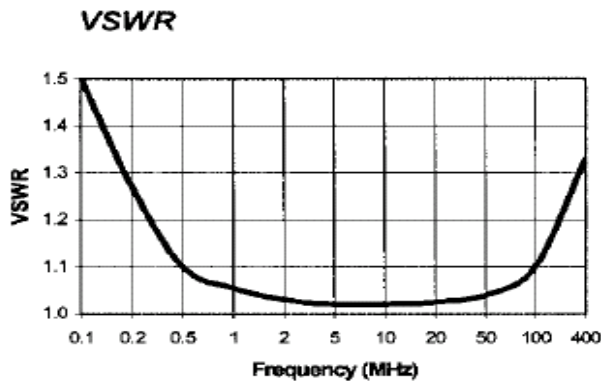
*Insertion Loss*



*Isolation*



*VSWR*



## Ordering Information

| Part Number | Package |
|-------------|---------|
| DS-310 PIN  | FP-5    |