

Surface Mount Two-Way Power Divider, 10 - 500 MHz

Rev. V3

Features

Fully Hermetic Package

• Phase Balance: 0.5° Typical

• Isolation: 40 dB Typical Midband

VSWR: 1.05:1 Typical Midband

• Impedance: 50 Ohms Nominal

Maximum Power Rating or Input Power: 1 Watt Max.

• Internal Load Dissipation: 0.05 Watts Max.

MIL-STD-202 Screening Available

Description

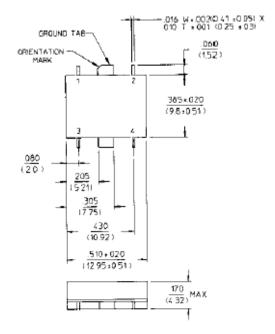
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A Power Divider is ideally a lossless reciprocal device which can also perform vector summation of two or more signals and thus is sometimes called a power combiner or summer.

Pin Configuration

| Pin No. | Function | Pin No. | Function |
|---------|----------|---------|----------|
| 1 | ΣΙΝ | 3 | GND |
| 2 | Output C | 4 | Output D |

SF-1



Dimensions in the original Dimensions in the Unless Otherwise Noted (XXX = ±0.000)

XX = ±0.02

WEIGHT (APPROX): 0.07 DUNCES 2 GRAMS

Electrical Specifications¹: $T_A = -55$ °C to +85°C

| Parameter | Test Conditions | Frequency | Units | Min | Тур | Max |
|-------------------|-----------------|--------------|-------|-----|-----|-------|
| Insertion Loss | Less Coupling | 10 - 500 MHz | dB | _ | _ | 0.6 |
| Isolation | ı | 10 - 500 MHz | dB | 25 | 1 | _ |
| Amplitude Balance | ı | 10 - 500 MHz | dB | ı | ı | 0.15 |
| Phase Balance | - | 10 - 500 MHz | 0 | | | 2 |
| VSWR | All Ports | 10 - 500 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.

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.

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



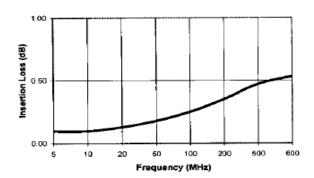
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Typical Performance Curves

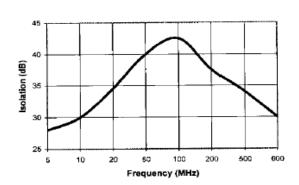
Insertion Loss

Insertion Loss



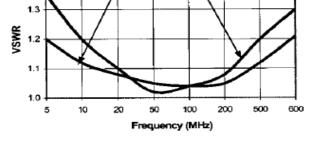
Isolation

Isolation



VSWR

VSWR



Ordering Information

| Part Number | Package | | |
|-------------|---------|--|--|
| DSS-333 PIN | SF-1 | | |

Commitment to produce in volume is not guaranteed.

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