

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

#### Features

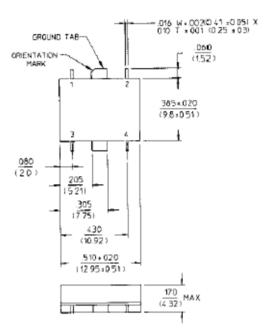
- Fully Hermetic Package
- Phase Balance: 0.5° Typical
- Isolation: 40 dB Typical Midband
- VSWR: 1.05:1 Typical Midband
- Impedance: 50 Ohms Nominal
- Maximum Power Rating or Input Power: 1 Watt Max.
- Internal Load Dissipation: 0.05 Watts Max.
- MIL-STD-202 Screening Available

#### Description

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       | Σ ΙΝ     | 3       | GND      |
| 2       | Output C | 4       | Output D |



SF-1

Dinansions in 12 ore in two Unless Officerwise Noted .XXX = 10.010 XX = 10.02 WEIGHT KAPPROX: 0.07 DUNCES = 2 GRAMS

# Electrical Specifications<sup>1</sup>: $T_A = -55^{\circ}C$ to +85°C

| Parameter         | Test Conditions | Frequency    | Units | Min | Тур | Мах   |
|-------------------|-----------------|--------------|-------|-----|-----|-------|
| Insertion Loss    | Less Coupling   | 10 - 500 MHz | dB    | _   | -   | 0.6   |
| Isolation         | _               | 10 - 500 MHz | dB    | 25  |     | —     |
| Amplitude Balance | —               | 10 - 500 MHz | dB    | —   | _   | 0.15  |
| Phase Balance     | —               | 10 - 500 MHz | o     | —   | _   | 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.
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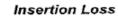


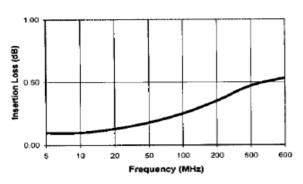
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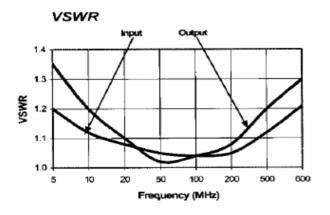
### **Typical Performance Curves**

#### Insertion Loss



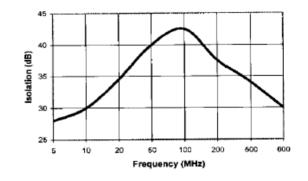


VSWR



Isolation

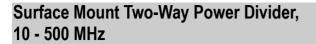
#### Isolation



## **Ordering Information**

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

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