

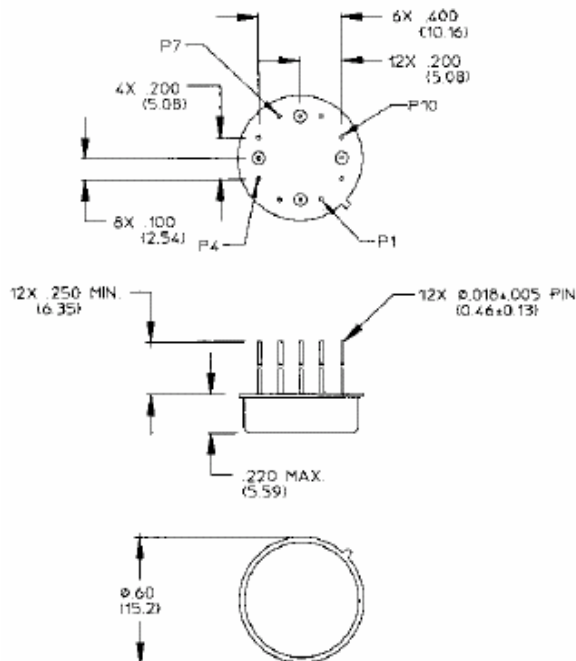
**Two-Way Power Divider,  
750 - 1500 MHz**

**DS-331  
V3**

**Features**

- Phase Balance: 2° Typical
- Isolation: 20 dB Typical Midband
- Input VSWR: 1.5:1 Typical Midband
- Impedance: 50 Ohms Nominal
- Maximum Power Rating or Input Power: 1 Watt Max.
- Internal Load Dissipation: 0.1 Watts Max.
- MIL-STD-202 Screening Available

**TO-8-2**



**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	Output D	7	
2	GND	8	GND
3		9	Output C
4	GND	10	
5	Σ	11	
6	GND	12	

Bottom of Case is AC Ground  
Dimensions in ( ) are in mm  
Unless Otherwise Noted: XXX = +0.010 (XX = ±0.25)  
XX = ±0.02 (X = ±0.5)

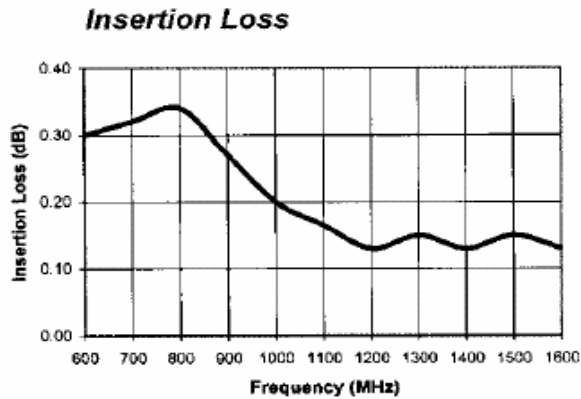
**Electrical Specifications<sup>1</sup>: T<sub>A</sub> = -55°C to +85°C**

Parameter	Test Conditions	Frequency	Units	Min	Typ	Max
Insertion Loss	Less Coupling	750 - 1500 MHz	dB	—	—	0.4
Isolation	—	750 - 1500 MHz	dB	10	—	—
Amplitude Balance	—	750 - 1500 MHz	dB	—	—	0.2
Phase Balance	—	750 - 1500 MHz	°	—	—	6
VSWR	Input	750 - 1500 MHz	Ratio	—	—	1.7:1
	Output	750 - 1500 MHz	Ratio	—	—	1.3:1

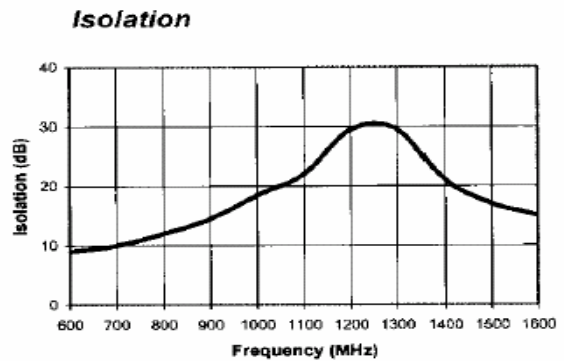
1. All specifications apply with 50 ohm source and load impedance.  
This product contains elements protected by United States Patent Number 3,428,920.

**Typical Performance Curves**

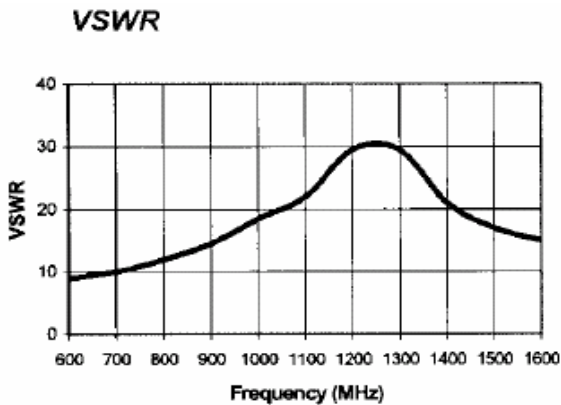
*Insertion Loss*



*Isolation*



*VSWR*



**Ordering Information**

Part Number	Package
DS-331 PIN	TO-8-2