

**Two-Way Power Dividers,  
1 - 100 MHz and 40 - 400 MHz**

**MTH-50/MTV-50  
V3**

**Features**

- Ideal for High Density Packaging
- High Isolation: 30 dB Min.
- VSWR: 1.3:1 Max.
- Impedance: 50 Ohms Nominal
- Maximum Power Rating or Input Power: 1 Watt Max.
- Internal Load Dissipation: 0.05 Watts Max.
- MIL-STD-883 Screening Available

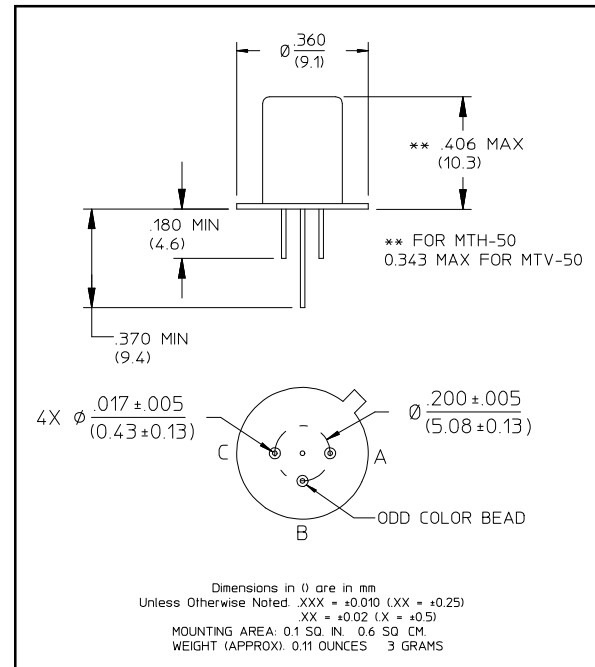
**Description**

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
A	Out	C	Out
B	In		

**TO-5-1**



**MTH-50 Electrical Specifications<sup>1</sup>: T<sub>A</sub> = -55°C to +85°C**

Parameter	Test Conditions	Frequency	Units	Min	Typ	Max
Frequency	—	1 - 100	MHz	—	—	—
Insertion Loss	Less Coupling	1 - 100 MHz	dB	—	—	0.5
Isolation	—	1 - 100 MHz	dB	30	—	—
Amplitude Balance	—	1 - 100 MHz	dB	—	—	0.1
Phase Balance	—	1 - 100 MHz	°	—	—	1.0
VSWR	—	1 - 100 MHz	Ratio	—	—	1.3:1

**MTV-50 Electrical Specifications<sup>1</sup>: T<sub>A</sub> = -55°C to +85°C**

Parameter	Test Conditions	Frequency	Units	Min	Typ	Max
Frequency	—	40 - 400 MHz	MHz	—	—	—
Insertion Loss	Less Coupling	40 - 400 MHz	dB	—	—	0.6
Isolation	—	40 - 400 MHz	dB	30	—	—
Amplitude Balance	—	40 - 400 MHz	dB	—	—	0.2
Phase Balance	—	40 - 400 MHz	°	—	—	2.0
VSWR	—	40 - 400 MHz	Ratio	—	—	1.3:1

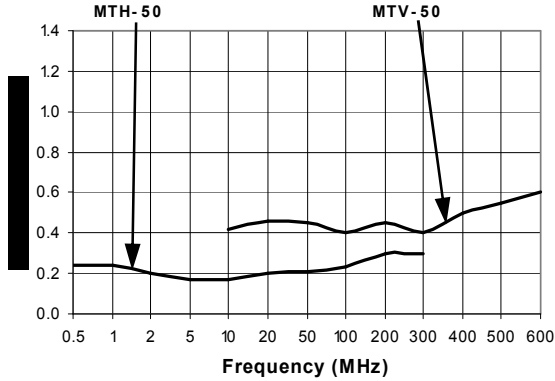
1. All specification apply with 50 ohm source and load impedance.

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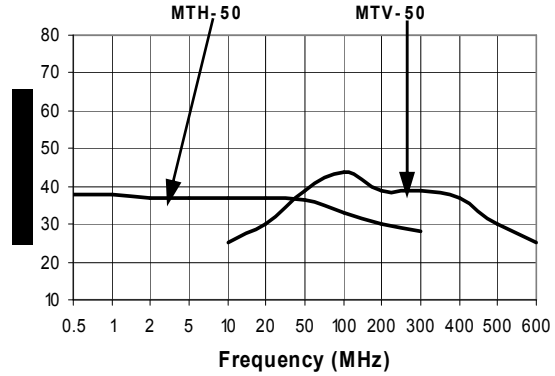
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**Typical Performance Curves**

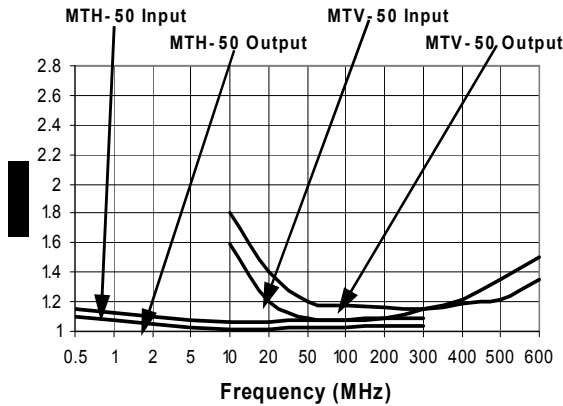
**Insertion Loss - Ports 2 - 3, 2 - 1**



**Isolation - Ports 1 - 3**



**VSWR**



**Ordering Information**

Part Number	Package