# MTH-50 / MTV-50



Two-Way Power Dividers. 1 - 100 MHz and 40 - 400 MHz

Rev. 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

Internal Load Dissipation: 0.05 Watts Max.

MIL-STD-883 Screening Available

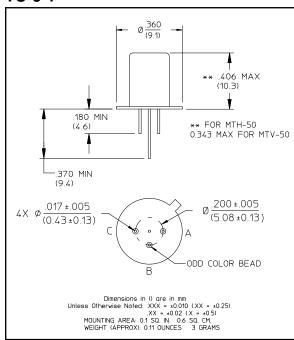
## **Description**

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
Α	Out	С	Out
В	In		

### TO-5-1



# MTH-50 Electrical Specifications<sup>1</sup>: $T_A = -55^{\circ}C$ to $+85^{\circ}C$

Parameter	Test Conditions	Frequency	Units	Min	Тур	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	٥	_	_	1.0
VSWR	_	1 - 100 MHz	Ratio	_	_	1.3:1

# MTV-50 Electrical Specifications<sup>1</sup>: $T_A = -55$ °C to +85°C

Parameter	Test Conditions	Frequency	Units	Min	Тур	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	0	_	_	2.0
VSWR	_	40 - 400 MHz	Ratio	_	_	1.3:1

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

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.

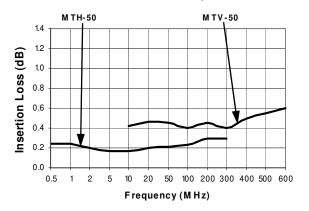


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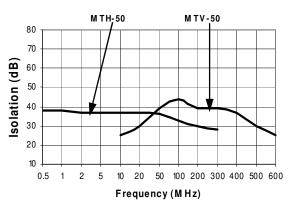
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## **Typical Performance Curves**

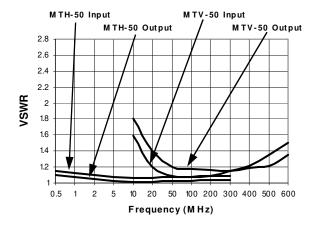
#### Insertion Loss - Ports 2 - 3, 2 - 1



#### Isolation - Ports 1 - 3



#### **VSWR**



## **Ordering Information**

Part Number	Package
MTH-50 PIN	TO-5-1
MTV-50 PIN	TO-5-1

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