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 Max.
- Internal Load Dissipation: 0.05 Watts Max.
- MIL-STD-883 Screening Available

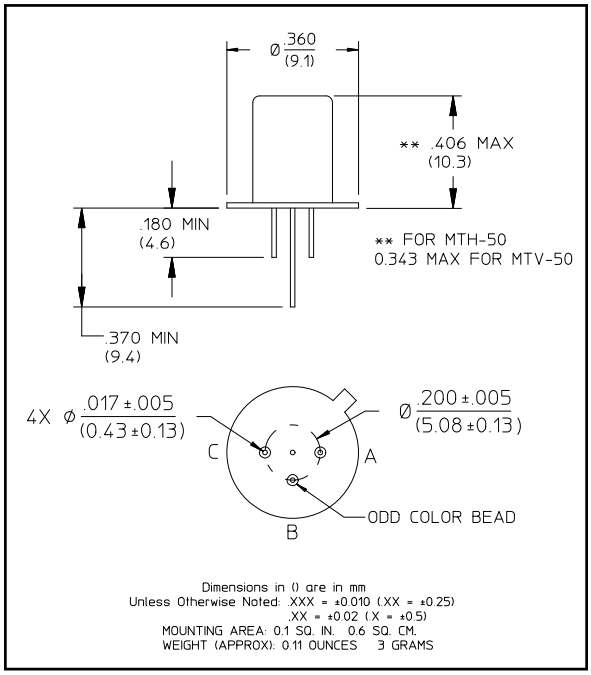
Description

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[1]: T_A = -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[1]: T_A = -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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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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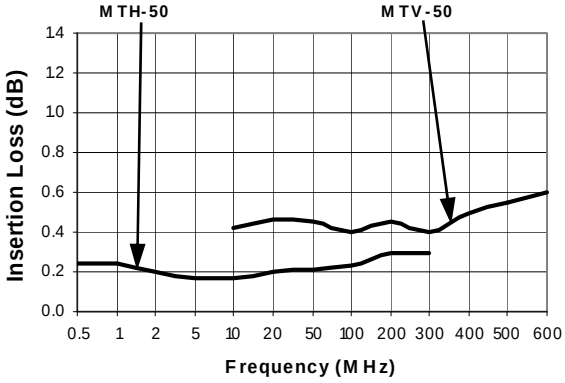
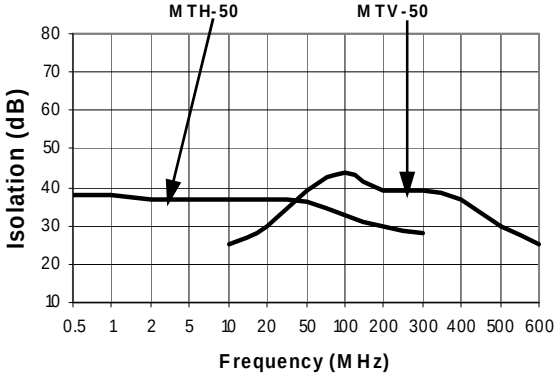
Typical Performance Curves

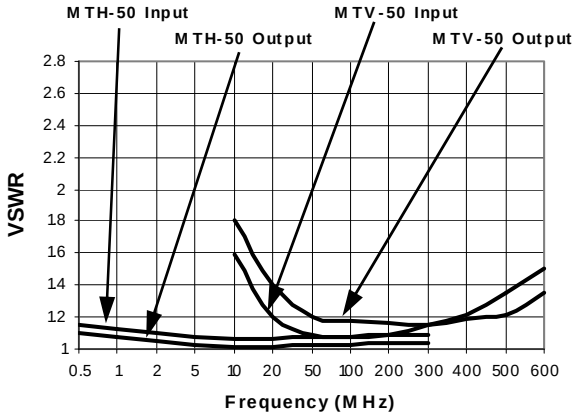
Insertion Loss - Ports 2 - 3, 2 - 1



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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