MTH-50 / MTV-50

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

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
А	Out	С	Out
В	In		



TO-5-1

Dimensions in 0 are in mm Unless Otherwise Noted: XXX = ±0.010 (XX = ±0.25) XX = ±0.02 (X = ±0.5) MOUNTING AREA: 0.1 SO. IN. 0.6 SO. CM. WEIGHT (APPROX): 0.11 OUNCES 3 GRAMS

MTH-50 Electrical Specifications¹: $T_A = -55^{\circ}C$ 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	0	—	—	1.0
VSWR	_	1 - 100 MHz	Ratio	_	—	1.3:1

MTV-50 Electrical Specifications¹: $T_A = -55^{\circ}C$ to $+85^{\circ}C$

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	o	—	_	2.0
VSWR	_	40 - 400 MHz	Ratio	—	_	1.3:1

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

1

Visit www.macomtech.com for additional data sheets and product information.

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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406 MAX

.200 ±.005

(5.08 ±0.13)

(10.3)

Rev. V3

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Typical Performance Curves





Rev. V3



VSWR



Ordering Information

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

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