

M3H-50 / M3V-50

Three-Way Power Dividers, 1 - 100 MHz and 50 - 300 MHz

Rev. V3

Features

- Ideal for High Density Packaging
- High Isolation
- 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-202 Screening Available

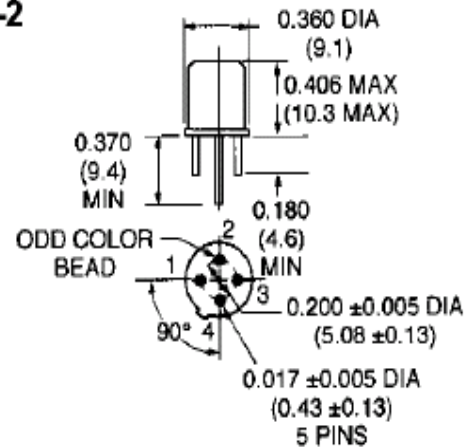
Description

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
P1	Out	P3	Out
P2	In	P4	Out

TO-5-2



Dimensions in () are in mm.

Unless Otherwise Noted: .xxx = ±0.010 (.xx = ±0.25)

.xx = ±0.02 (.x = ±0.5)

MOUNTING AREA: 0.1 SQ. IN. 0.6 SQ. CM.

WEIGHT (APPROX.): 0.11 OUNCES 3 GRAMS

M3H-50 Electrical Specifications¹: $T_A = -55^\circ\text{C}$ to $+85^\circ\text{C}$

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	—	—	0.2
Phase Balance	—	1 - 100 MHz	°	—	—	1.0
VSWR	—	1 - 100 MHz	Ratio	—	—	1.3:1

M3V-50 Electrical Specifications¹: $T_A = -55^\circ\text{C}$ to $+85^\circ\text{C}$

Parameter	Test Conditions	Frequency	Units	Min	Typ	Max
Frequency	—	50 - 300 MHz	MHz	—	—	—
Insertion Loss	Less Coupling	50 - 300 MHz	dB	—	—	0.75
Isolation	—	50 - 300 MHz	dB	25	—	—
Amplitude Balance	—	50 - 300 MHz	dB	—	—	0.2
Phase Balance	—	50 - 300 MHz	°	—	—	2.0
VSWR	—	50 - 300 MHz	Ratio	—	—	1.3:1

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

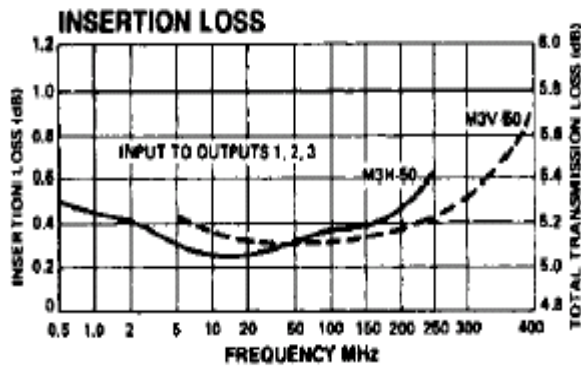
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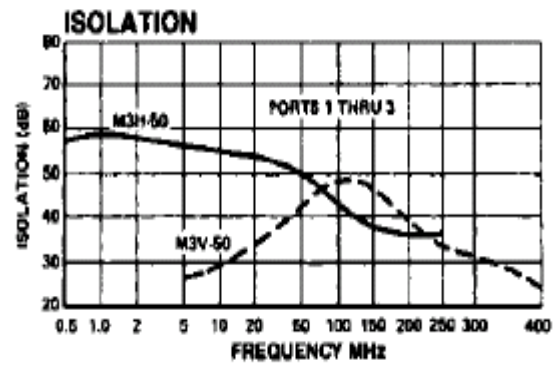
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Typical Performance Curves

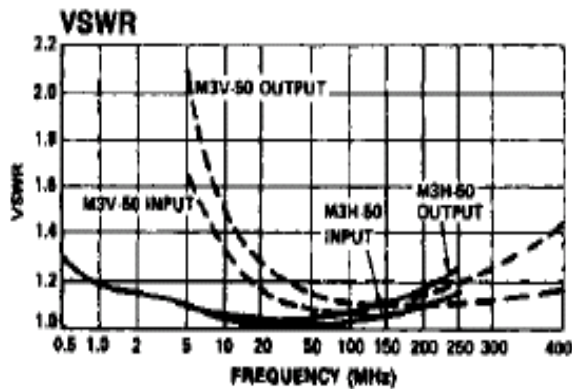
Insertion Loss - Ports 2 - 3, 2 - 1



Isolation - Ports 1 - 3



VSWR



Ordering Information

Part Number	Package
M3H-50 PIN	TO-5-2
M3V-50 PIN	TO-5-2