

# MAPD-010320-5070HR



## E-Series 2-Way 90° Power Divider 50-70 MHz

Rev. V2

### Features

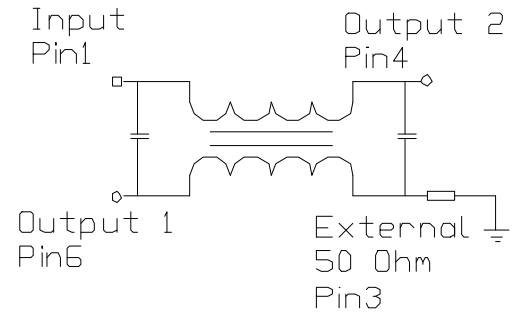
- 2-way
- 90 Degree
- Surface Mount
- Tape and reel packaging available
- 260°C Reflow Compatible
- RoHS\* compliant

### Description

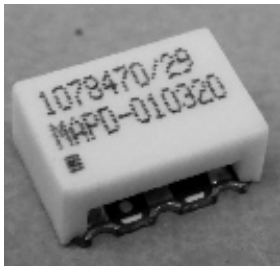
M/A-COM's MAPD-010320-5070HR is a RoHS Compliant 2-way 90° power divider in a low cost, surface mount package. Ideally suited for high volume cellular, wireless applications.

The MAPD-010320-5070HR is designed to be utilized in both RoHS and standard reflow profiles. Parts are packaged in tape & reel.

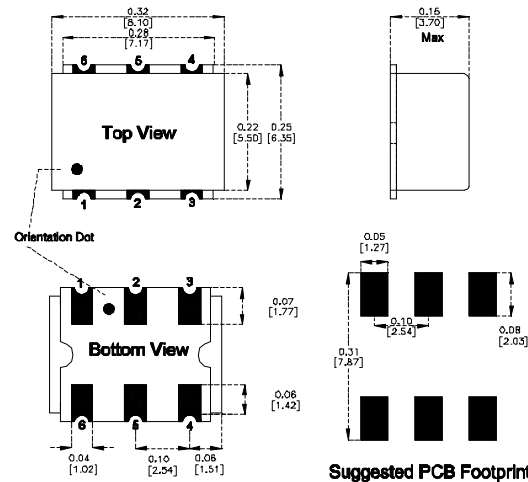
### Schematic



### Product Image



### SM-89



\* Dimensions are inches (millimeters) ±0.015 (0.38) unless otherwise specified.

### Pin Configuration

Pin No.	Function
Input	1
Port 1	4
Port 2	6
External 50 Ohms	3
Not Connected	2,5

\* Restrictions on Hazardous Substances, European Union Directive 2002/95/EC.

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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.

• **North America** Tel: 800.366.2266 • **Europe** Tel: +353.21.244.6400  
 • **India** Tel: +91.80.43537383 • **China** Tel: +86.21.2407.1588  
 Visit [www.macomtech.com](http://www.macomtech.com) for additional data sheets and product information.

M/A-COM Technology Solutions Inc. and its affiliates reserve the right to make changes to the product(s) or information contained herein without notice.

**Electrical Specifications:  $T_A = 25^\circ\text{C}$ ,  $Z_0 = 50\Omega$**

Parameter	Frequency	Units	Min.	Typ.	Max.
Insertion Loss (Average above 3dB)	50 - 70 MHz	dB	—	0.3	0.5
	60 - 65 MHz	dB	—	0.1	0.3
Isolation	50 - 70 MHz	dB	30	—	—
	60 - 65 MHz	dB	30	32	—
Amplitude Unbalance	50 - 70 MHz	dB	—	1.0	2.0
	60 - 65 MHz	dB	—	0.1	0.5
Phase Unbalance	50 - 70 MHz	°	—	0.3°	0.5°
Input Return Loss	50 - 70 MHz	dB	24	27	—

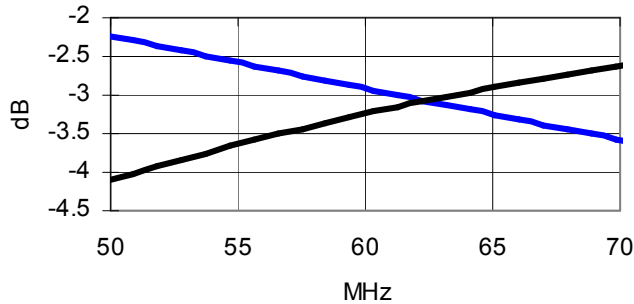
## Absolute Maximum Ratings <sup>1,2</sup>

Parameter	Absolute Maximum
Impedance	50 Ohms nominal
RF Power	1 Watt
Internal Load Dissipation	0.125 Watt
Operating Temperature	-40°C to +85°C
Storage Temperature	-55°C to +125°C

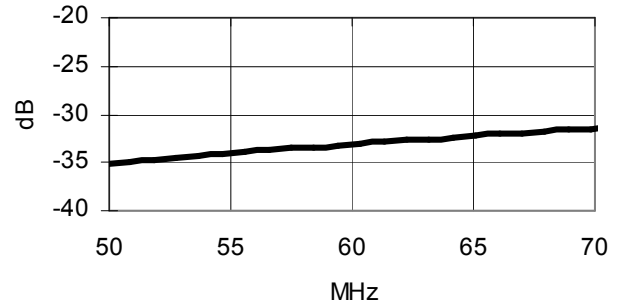
1. Exceeding any one or combination of these limits may cause permanent damage to this device.
2. M/A-COM does not recommend sustained operation near these survivability limits.

## Typical Performance Curves

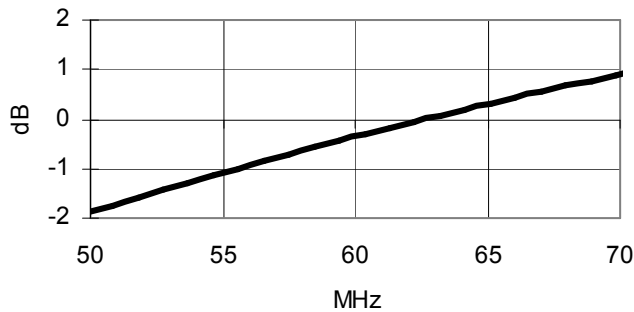
**Insertion Loss**



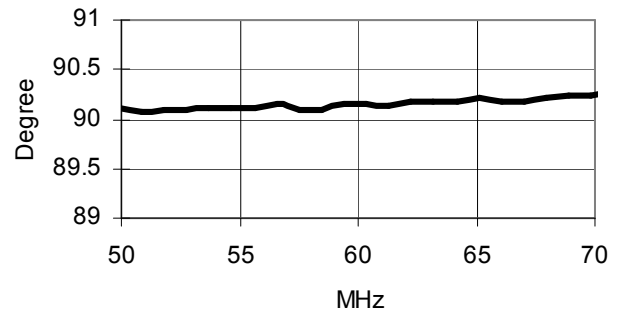
**Isolation**



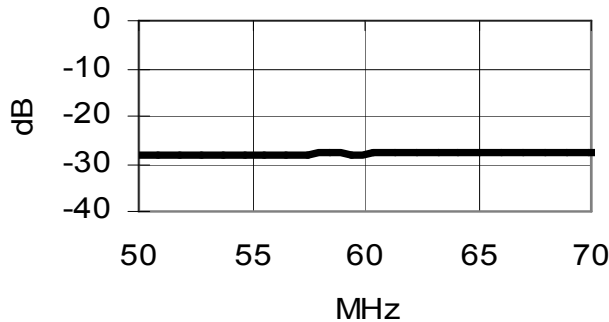
**Amplitude Unbalance**



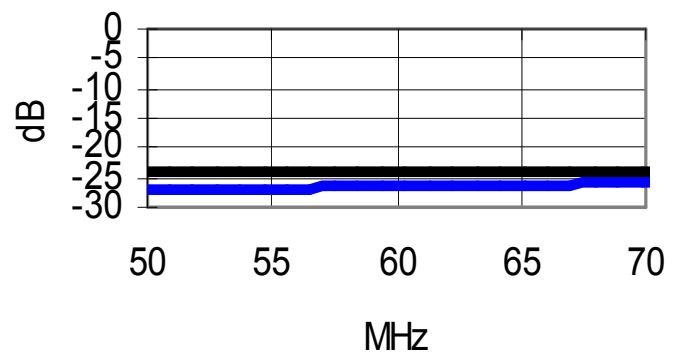
**Phase Unbalance**



**Input Return Loss**



**Output Return Loss**

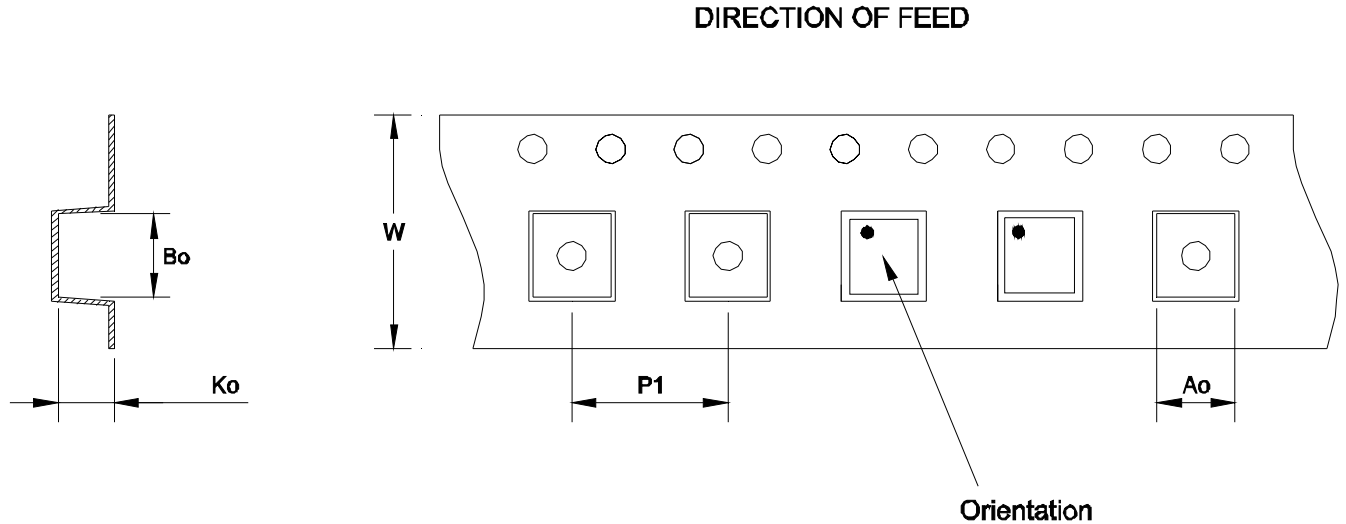


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## Tape Specification



Item	Dimension
Ao	7.01mm +/-0.1mm
Bo	8.61mm +/-0.1mm
Ko	5.23mm +/-0.1mm
W	16.00mm +/-0.3mm
P1	12.00mm +/-0.1mm

## Ordering Information

Part Number	Package
MABA-010320-5070HR	Tape and Reel (900 piece Reel)