

2 Way 0° Power Divider
50-120MHz

MAPD-008185-C20720
V2

Features

- Surface Mount
- 2 Way 0° Power Divider
- 260°C Reflow Compatible
- RoHS* Compliant
- RoHS version of ESSM-2-9-75
- Available on Tape and Reel. Reel Quantity 2000

Description

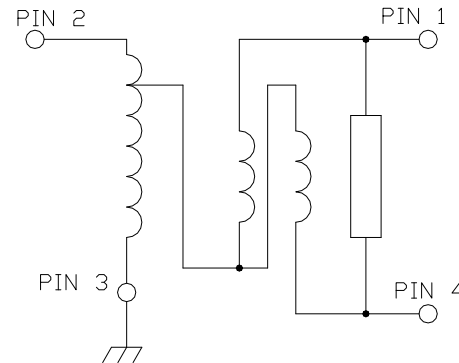
M/A-COM's MAPD-008185-C20720 is a 2 Way 0° Power Divider in a low cost, surface mount package. ideally suited for high volume cellular, wireless and CATV applications. No external resistor is required with this part.



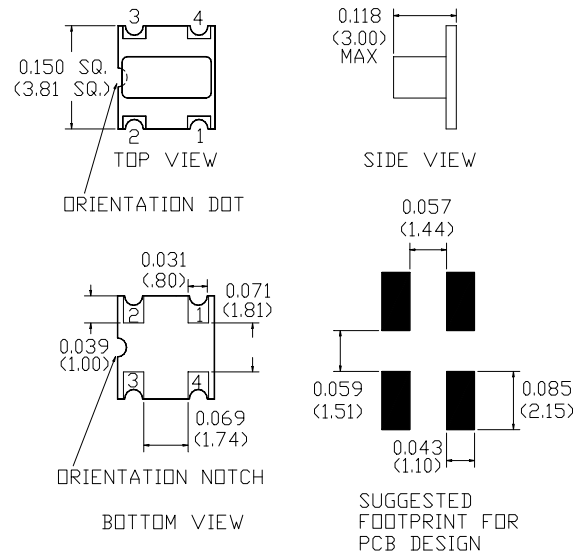
Pin Configuration

Pin No.	Function
1	Port 1
2	Input
3	Ground
4	Port 2

Schematic



Case Style: SM-114



Ordering Information

Part Number	Package
MAPD-008185-C20720	2000
MAPD-008185-C207TB	Customer Test Board

Note: Reference Application Note **M513** for reel size information.

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

1

ADVANCED: Data Sheets contain information regarding a product M/A-COM Technology Solutions is considering for development. Performance is based on target specifications, simulated results, and/or prototype measurements. Commitment to develop is not guaranteed.

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: +91.80.4155721 • **China** Tel: +86.21.2407.1588

Visit 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.

2 Way 0° Power Divider
50-120MHz

MAPD-008185-C20720
V2

Electrical Specifications: $T_A = 25^\circ\text{C}$, $Z_0 = 75\Omega$ ¹

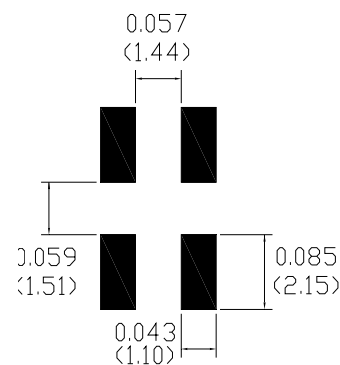
Parameter	Frequency	Units	Min	Typ	Max
Insertion Loss	5 - 120 MHz	dB	—	00.3	00.6
Isolation	5 - 50MHz	dB	23	—	—
	50 - 60MHz	dB	22	—	—
	60 - 120MHz	dB	21	—	—
Amplitude Unbalance	5 - 120MHz	dB	—	—	00.5
Phase Unbalance	5 - 120 MHz	°	—	—	2.0°

Absolute Maximum Ratings ^{1,2}

Parameter	Absolute Maximum
RF Power	1 Watt
Internal Load Dissipation	0.125 Watt
Pin Temp (10 Sec)	260°C
Operating/Storage Temperature	-55°C to +100°C

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

Recommended PCB Configuration



SUGGESTED
FOOTPRINT FOR
PCB DESIGN

2

ADVANCED: Data Sheets contain information regarding a product M/A-COM Technology Solutions is considering for development. Performance is based on target specifications, simulated results, and/or prototype measurements. Commitment to develop is not guaranteed.

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: +91.80.4155721 • **China** Tel: +86.21.2407.1588

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

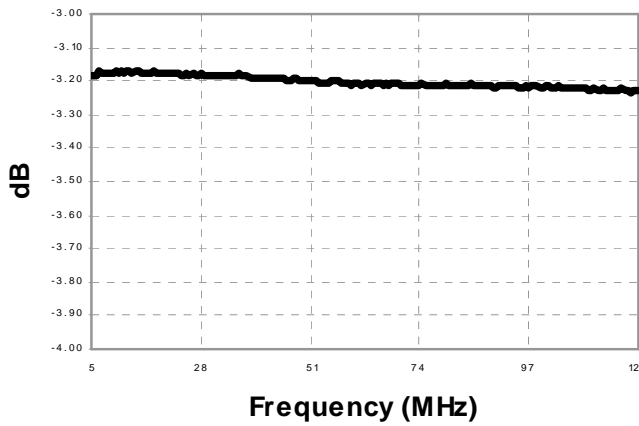
M/A-COM Technology Solutions Inc. and its affiliates reserve the right to make changes to the product(s) or information contained herein without notice.

2 Way 0° Power Divider
50-120MHz

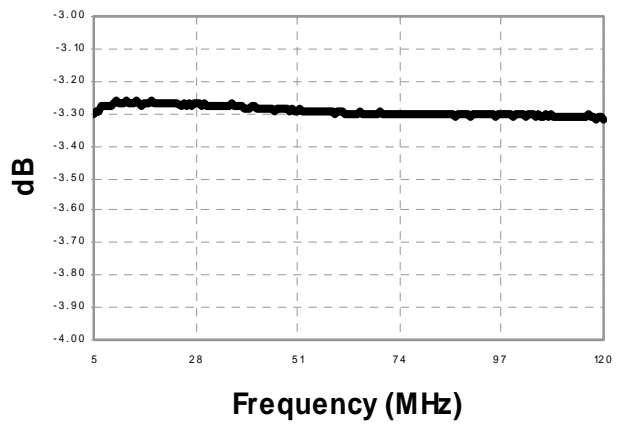
MAPD-008185-C20720
V2

Typical Performance Curves: $T_A = 25^\circ\text{C}$, $Z_0 = 75\Omega$ ¹

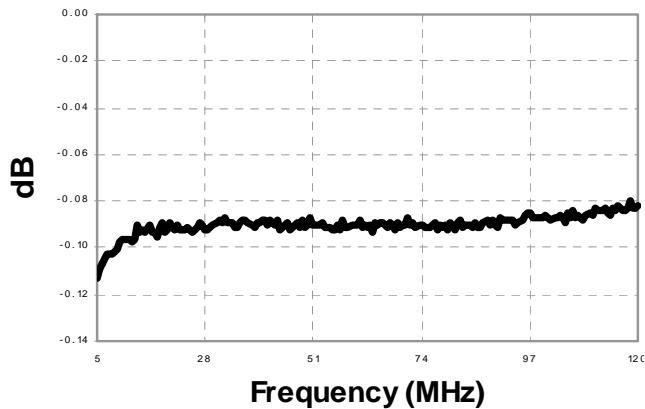
Insertion Loss 1: Pin 4 to 1



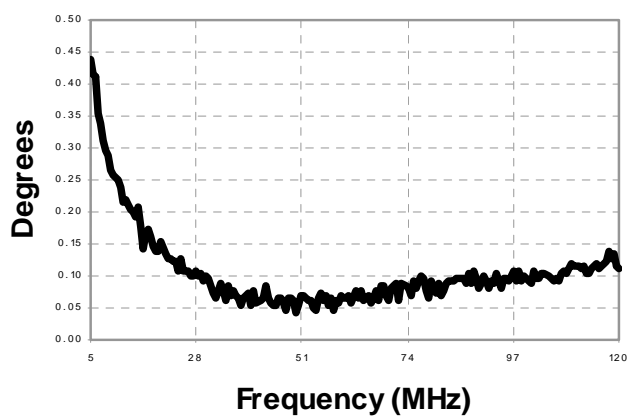
Insertion Loss 2: Pin 4 to 6



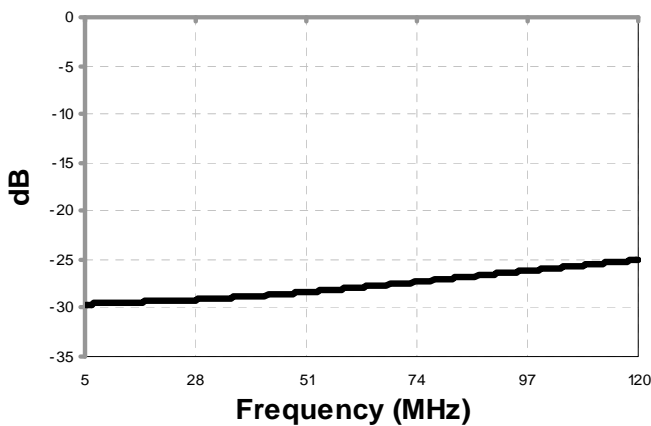
Amplitude Unbalance



Phase Unbalance



Isolation



3

ADVANCED: Data Sheets contain information regarding a product M/A-COM Technology Solutions is considering for development. Performance is based on target specifications, simulated results, and/or prototype measurements. Commitment to develop is not guaranteed.

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: +91.80.4155721 • China Tel: +86.21.2407.1588

Visit 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.