

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

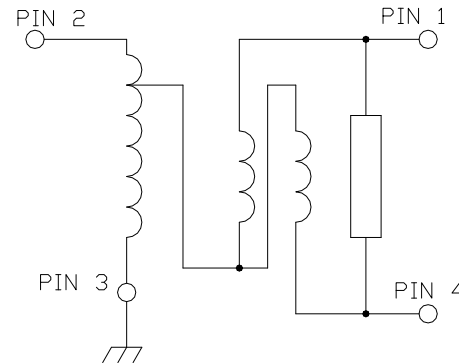
M/A-COM's MAPD-008185-C20720 is a 2 Way 0° Power Divider in a low cost, surface mount package. ideally suited for high volume cellular, wireless and CATV applications. No external resistor is required with this part.



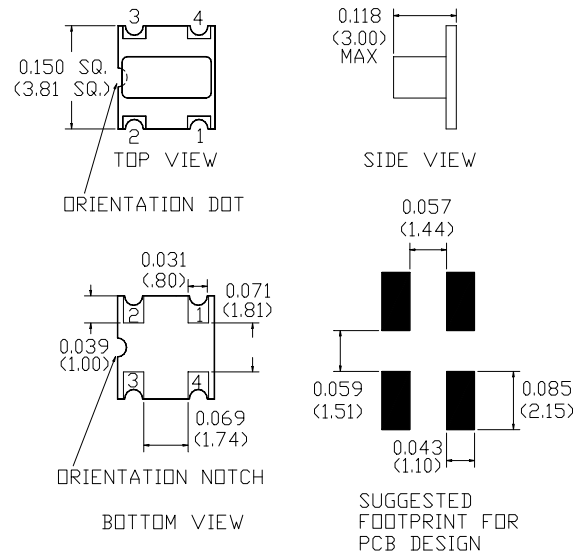
## Pin Configuration

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.

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

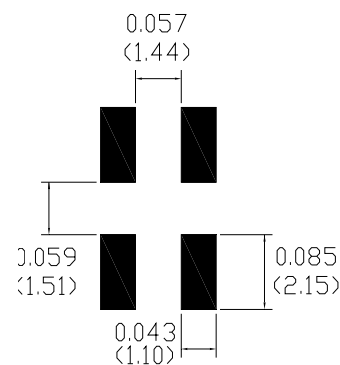
Parameter	Frequency	Units	Min	Typ	Max
Insertion Loss	5 - 120 MHz	dB	—	00.3	00.6
Isolation	5 - 50MHz	dB	23	—	—
	50 - 60MHz	dB	22	—	—
	60 - 120MHz	dB	21	—	—
Amplitude Unbalance	5 - 120MHz	dB	—	—	00.5
Phase Unbalance	5 - 120 MHz	°	—	—	2.0°

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

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

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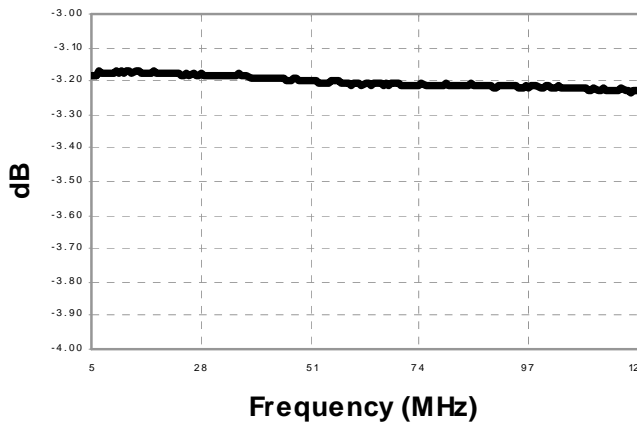
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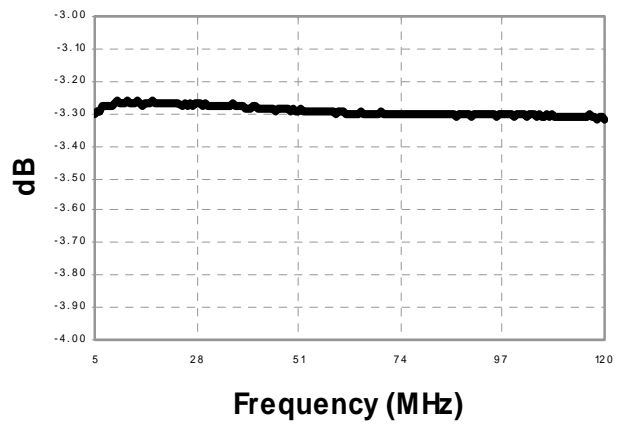
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Typical Performance Curves:  $T_A = 25^\circ\text{C}$ ,  $Z_0 = 75\Omega$  <sup>1</sup>

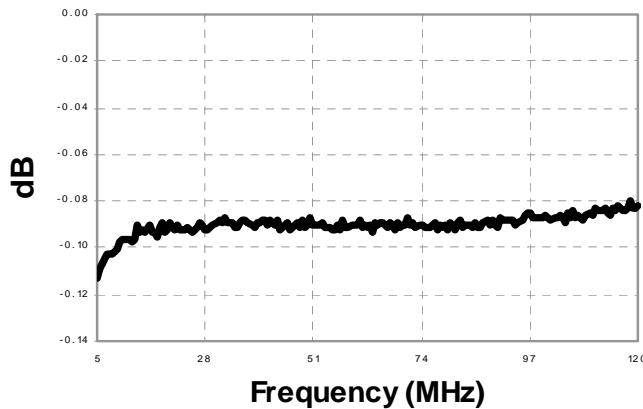
Insertion Loss 1: Pin 4 to 1



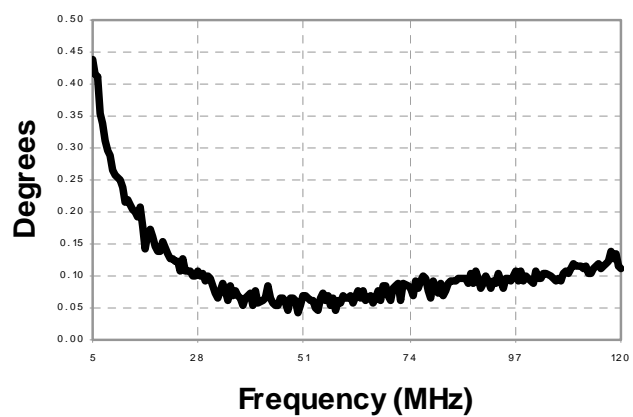
Insertion Loss 2: Pin 4 to 6



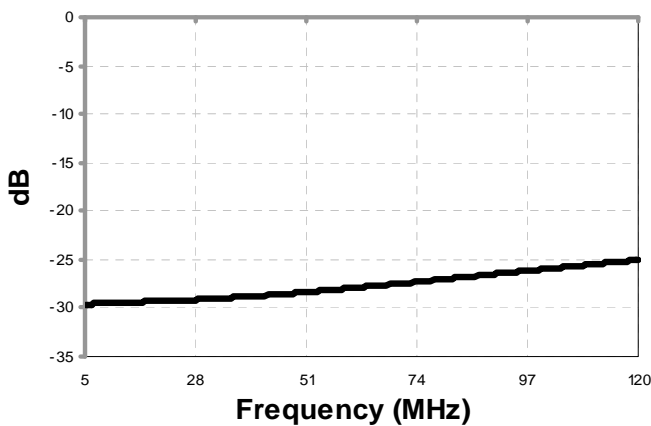
Amplitude Unbalance



Phase Unbalance



Isolation



3

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