



MAPD-008185-C20720 V2

# 2 Way 0° Power Divider 50-120MHz

#### **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

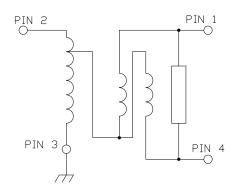
Pin No.	Function		
1	Port 1		
2	Input		
3	Ground		
4	Port 2		

# Ordering Information

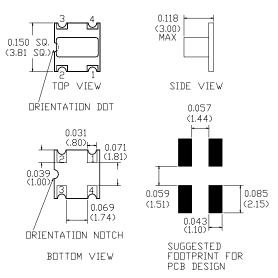
Part Number	Package		
MAPD-008185-C20720	2000		
MAPD-008185-C207TB	Customer Test Board		

Note: Reference Application Note M513 for reel size information.

## **Schematic**



# Case Style: SM-114



Dimensions in inches [mm] Tolerance: .xx ± .02, .xxx ± .010

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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: +91.80.4155721 China Tel: +86.21.2407.1588

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

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





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

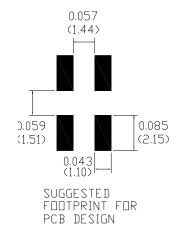
Parameter	Frequency	Units	Min	Тур	Max
Insertion Loss	5 - 120 MHz	dB	_	00.3	00.6
Isolation	5 - 50MHz 50 - 60MHz 60 - 120MHz	dB dB dB	23 22 21	_ _ _	_ _ _
Amplitude Unbalance	5 - 120MHz	dB	_	_	00.5
Phase Unbalance	5 - 120 MHz	0	_	_	2.0°

# **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**



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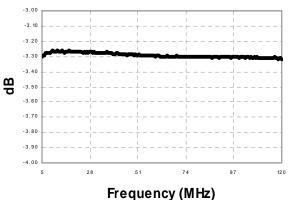
2 Way 0° Power Divider 50-120MHz

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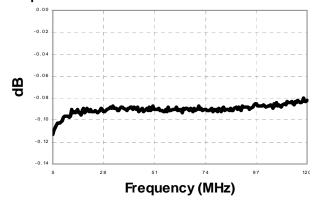
Typical Performance Curves:  $T_A = 25^{\circ}C$ ,  $Z_0 = 75\Omega^{1}$ 

# Insertion Loss 1: Pin 4 to 1 -3.30 -3.40 Frequency (MHz)

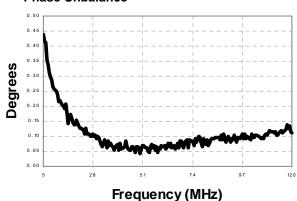
# Insertion Loss 2: Pin 4 to 6



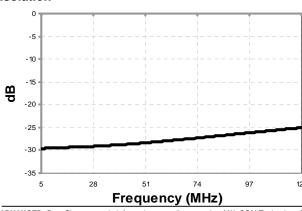
#### **Amplitude Unbalance**



#### **Phase Unbalance**



### Isolation



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