

**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

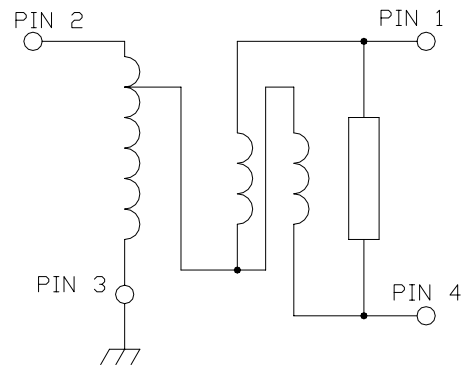
M/A-COM's MAPD-008185-C20720 is a 2 Way 0° Power Divider in a low cost, surface mount package. ideally suited for high volume cellular, wireless and CATV applications. No external resistor is required with this part.



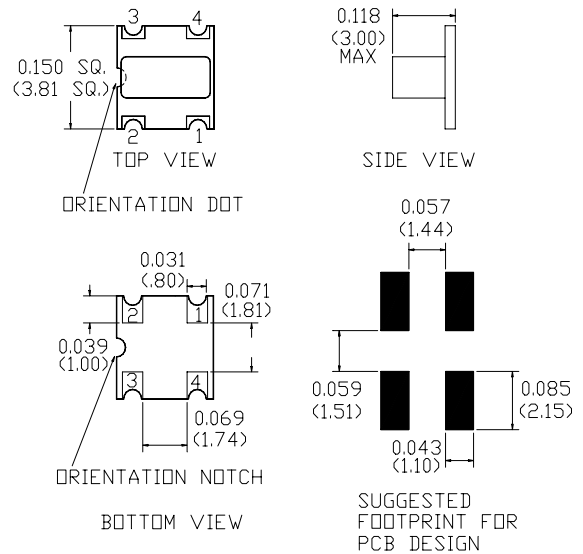
Pin Configuration

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

Schematic



Case Style: SM-114



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

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

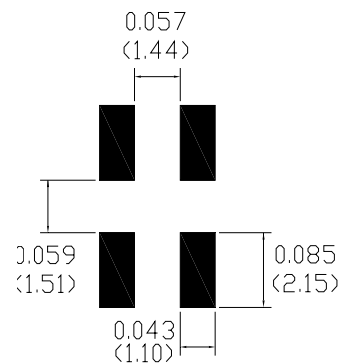
| Parameter | Frequency | Units | Min | Typ | Max |
|---------------------|-------------|-------|-----|------|------|
| Insertion Loss | 5 - 120 MHz | dB | — | 00.3 | 00.6 |
| Isolation | 5 - 50MHz | dB | 23 | — | — |
| | 50 - 60MHz | dB | 22 | — | — |
| | 60 - 120MHz | dB | 21 | — | — |
| Amplitude 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.

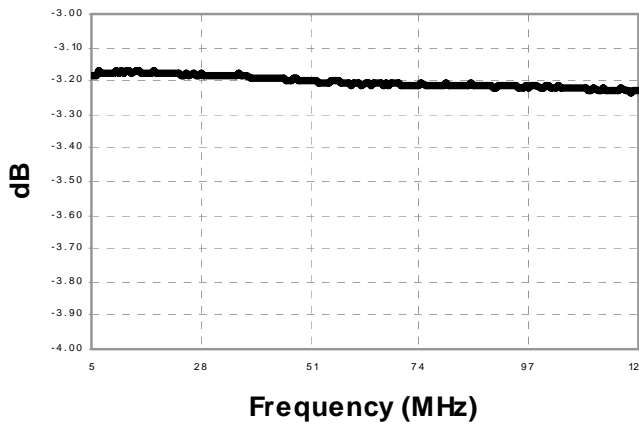
Recommended PCB Configuration



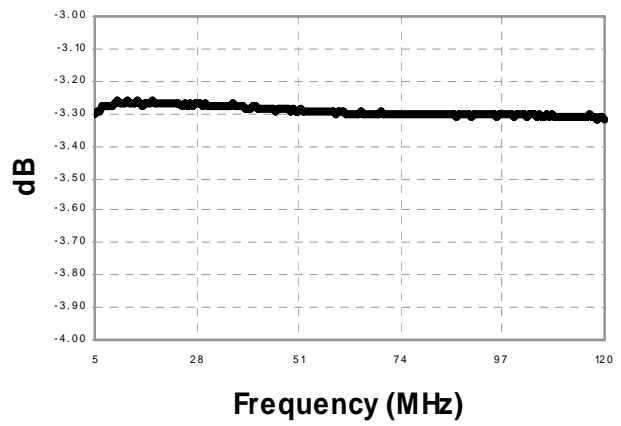
SUGGESTED
FOOTPRINT FOR
PCB DESIGN

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

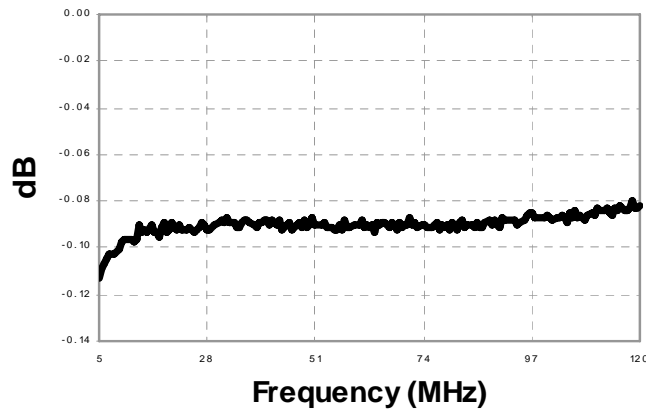
Insertion Loss 1: Pin 4 to 1



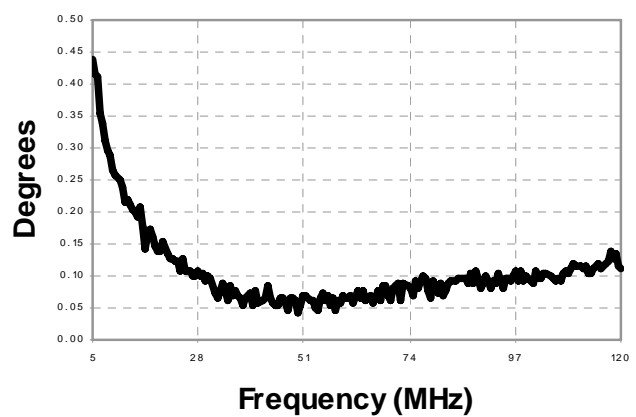
Insertion Loss 2: Pin 4 to 6



Amplitude Unbalance



Phase Unbalance



Isolation

