

Features

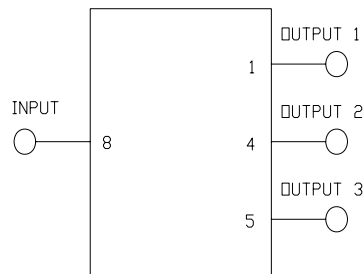
- Surface Mount
- 75 Ohms
- RoHS Compliant
- RoHS version of ESSM-3-1-75

Description

M/A-COM's MAPD-008109-C30040 is a 3 Way 0° Power Divider in a low cost, surface mount package. Ideally suited for high volume CATV applications.



Schematic



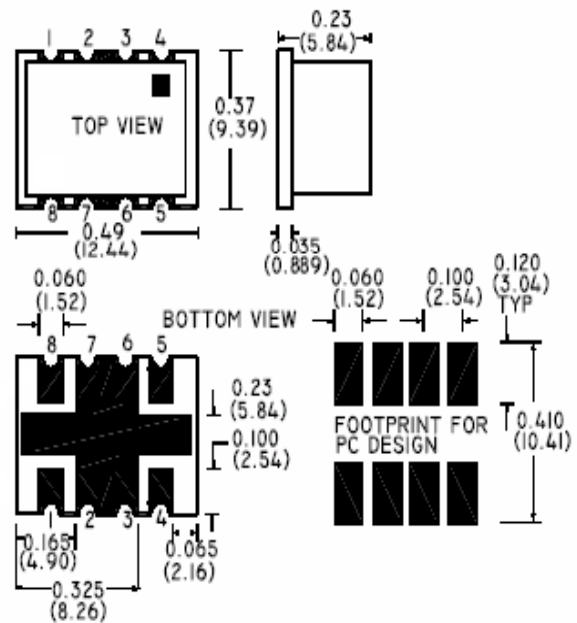
Pin Configuration

| Function | Pin No. |
|---------------|---------|
| Ground | 2,3,6,7 |
| Output Port 1 | 1 |
| Output Port 2 | 4 |
| Output Port 3 | 5 |
| Input | 8 |

Ordering Information

| Part Number | Package |
|--------------------|---------------------|
| MAPD-008109-C30040 | 500 piece reel |
| MAPD-008109-C300TB | Customer Test Board |

Case Style: SM-4



Dimensions in inches [mm].
Tolerance where not specified: .xx ± .02, .xxx ± .010

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

| Parameter | Frequency | Units | Min | Typ | Max |
|---------------------|--------------|-------|-----|------|---------------|
| Insertion Loss | 5 - 200 MHz | dB | — | 0.28 | 0.5 |
| Isolation | 5 - 50 MHz | dB | 30 | 37 | — |
| | 50 - 60 MHz | dB | 33 | 40 | — |
| | 60 - 125MHz | dB | 28 | 36 | — |
| | 125 - 200MHz | dB | 24 | 28 | — |
| Amplitude Unbalance | 5 - 200 MHz | dB | — | — | ± 0.1 |
| Phase Unbalance | 5 - 200 MHz | ° | — | — | $\pm 1^\circ$ |
| Input Return Loss | 5 –200 MHz | dB | 28 | 34 | — |
| Output Return Loss | 5 –200 MHz | dB | 20 | 25 | — |

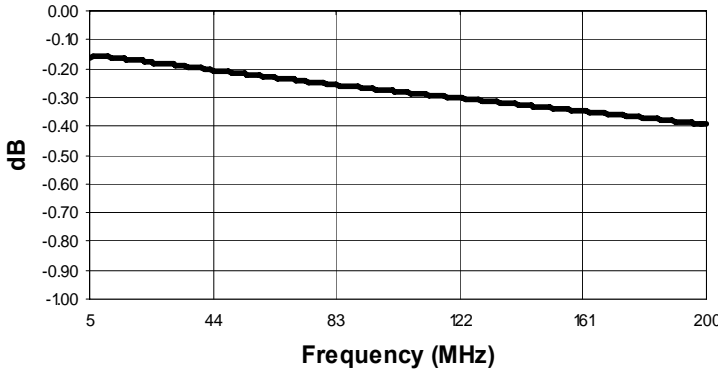
Absolute Maximum Ratings ^{1,2}

| Parameter | Absolute Maximum |
|---------------------------|------------------|
| RF Power | 1 Watt |
| Internal Load Dissipation | 0.125 Watt |
| Pin Temp (10 sec.) | 260°C |
| Storage Temperature | -55°C to +100°C |
| Operating Temperature | -40°C to +85°C |

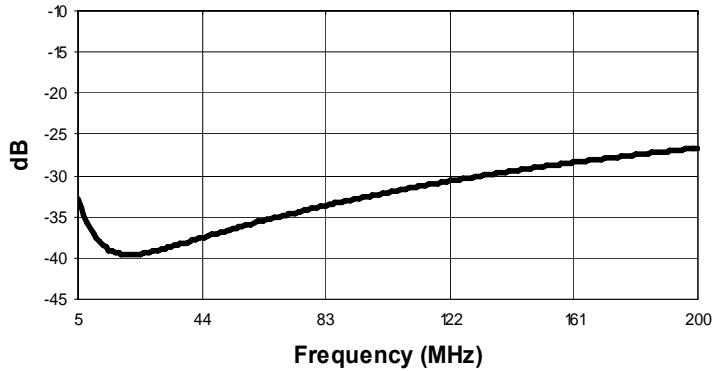
1. Exceeding any one or combination of these limits may cause permanent damage to this device.
2. M/A-COM does not recommend sustained operation near these survivability limits.

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

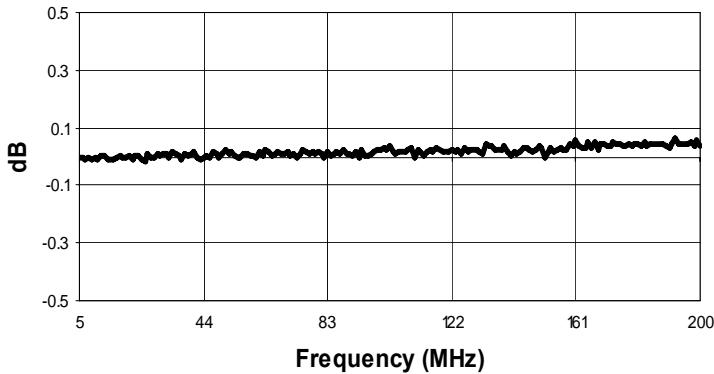
Insertion Loss: Reference Value -4.77dB



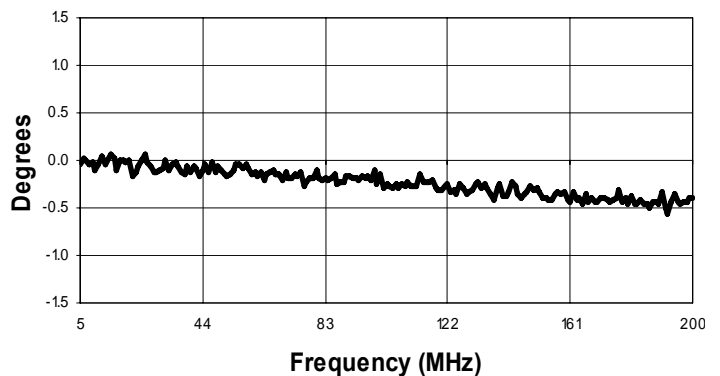
Isolation



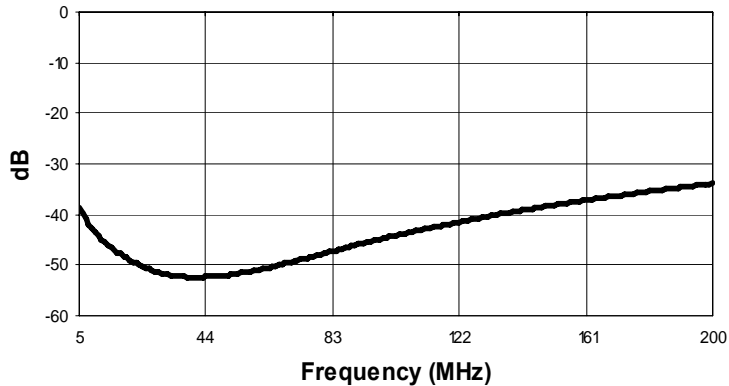
Amplitude Unbalance



Phase Unbalance



Return Loss: Input



Return Loss: Output

