

## Features

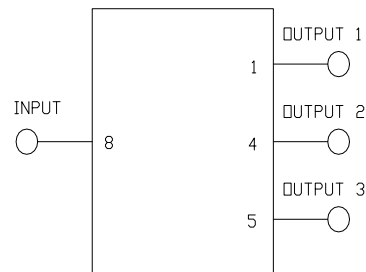
- Surface Mount
- 75 Ohms
- RoHS Compliant
- RoHS version of ESSM-3-1-75

## 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.



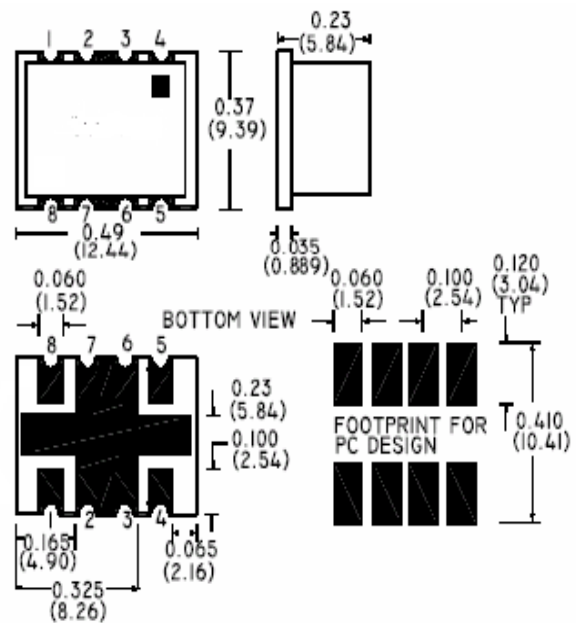
## Schematic



## Pin Configuration

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

## Case Style: SM-4



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

## Ordering Information

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

**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	—	—	$\pm 0.1$
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	—

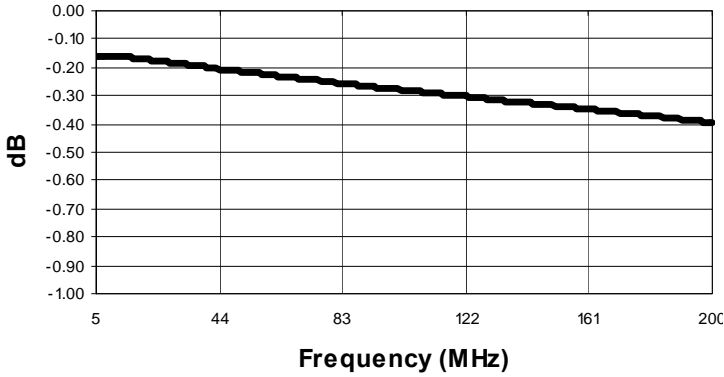
**Absolute Maximum Ratings <sup>1,2</sup>**

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

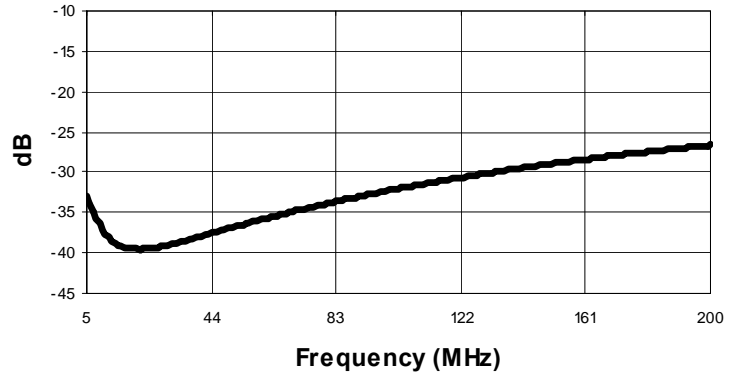
1. Exceeding any one or combination of these limits may cause permanent damage to this device.
2. M/A-COM does not recommend sustained operation near these survivability limits.

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

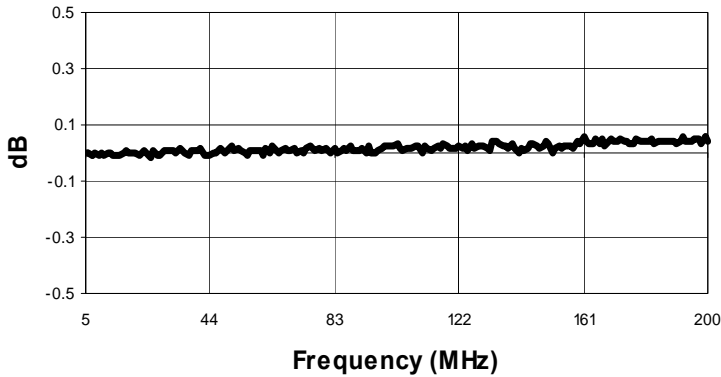
**Insertion Loss: Reference Value -4.77dB**



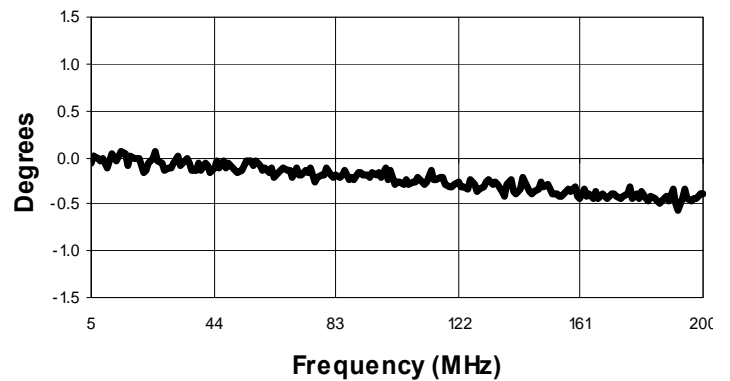
**Isolation**



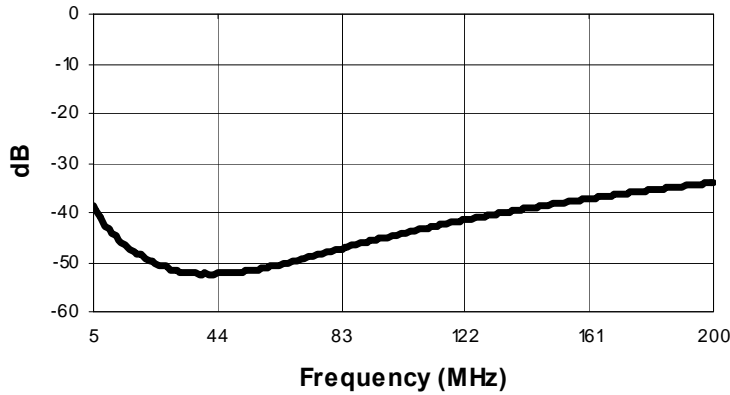
**Amplitude Unbalance**



**Phase Unbalance**



**Return Loss: Input**



**Return Loss: Output**

