

# E-Series 3-Way 0° Power Divider 5 - 200 MHz



MAPD-008109-C30040

Rev. V5

## Features

- 75  $\Omega$
- Surface Mount Technology
- RoHS\* Compliant Version of ESSM-3-1-75

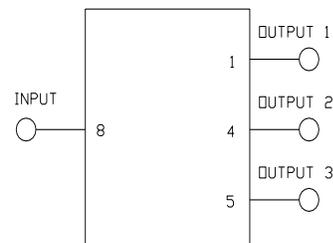
## Applications

- CATV

## Description

The MAPD-008109-C30040 is a 3 Way 0° power divider in a surface mount package. Ideally suited for high volume CATV applications.

## Schematic



## Pin Configuration

Pin #	Function	Pin #	Function
1	Output Port 1	5	Output Port 3
2,3,6,7	Ground	8	Input
4	Output Port 2		

## Electrical Specifications: Freq. = 5 - 200 MHz, T<sub>A</sub> = 25°C, Z<sub>0</sub> = 75 $\Omega$

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

## Ordering Information

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

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

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

5. Exceeding any one or combination of these limits may cause permanent damage to this device.
6. MACOM does not recommend sustained operation near these survivability limits.

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## 5 - 200 MHz

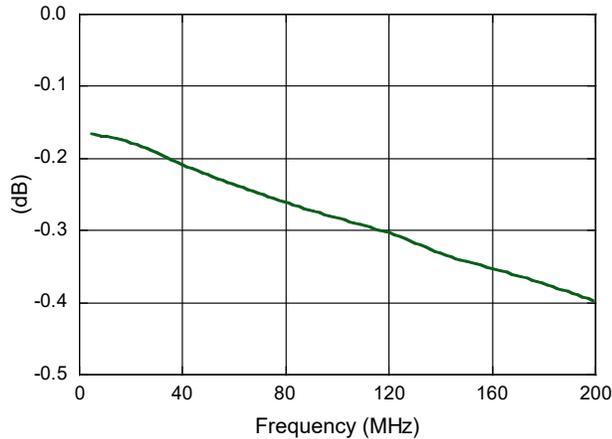


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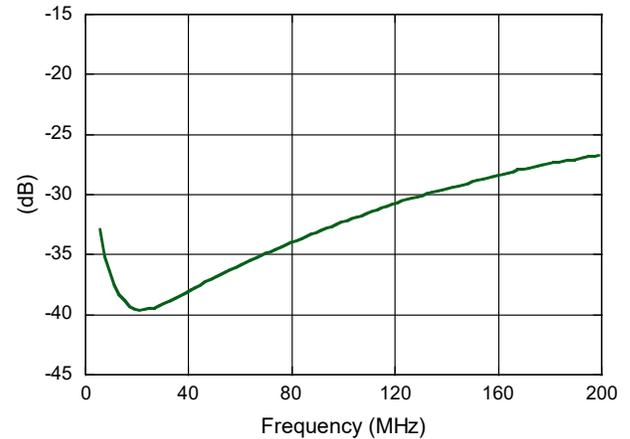
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### Typical Performance Curves $T_A = 25^\circ\text{C}$ , $Z_0 = 75 \Omega$

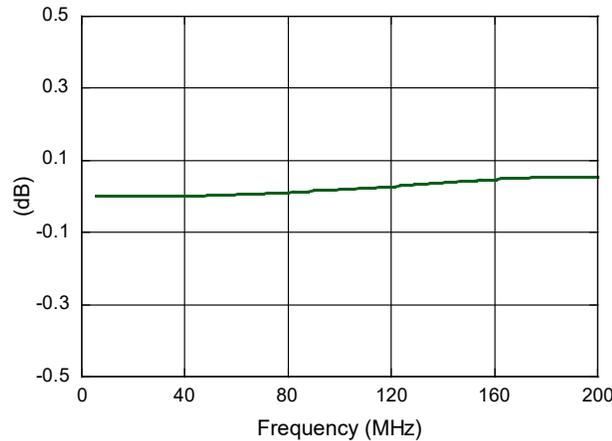
**Insertion Loss: Reference Value -4.77 dB**



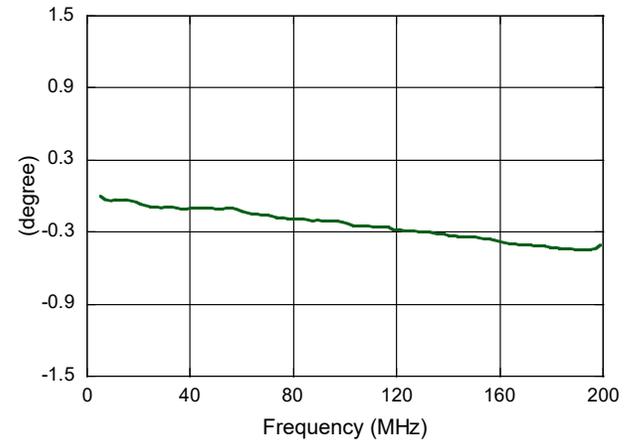
**Isolation**



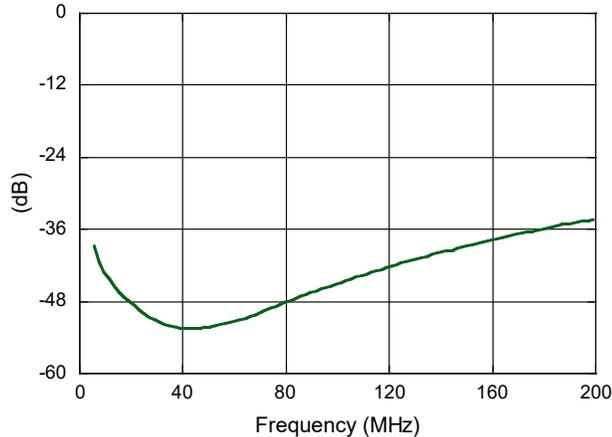
**Amplitude Unbalance**



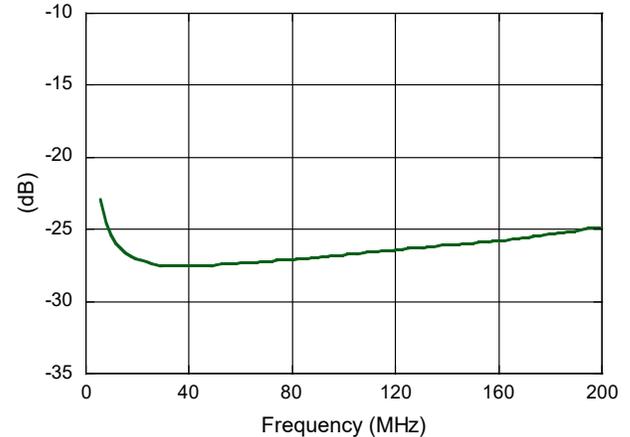
**Phase Unbalance**



**Input Return Loss**



**Output Return Loss**



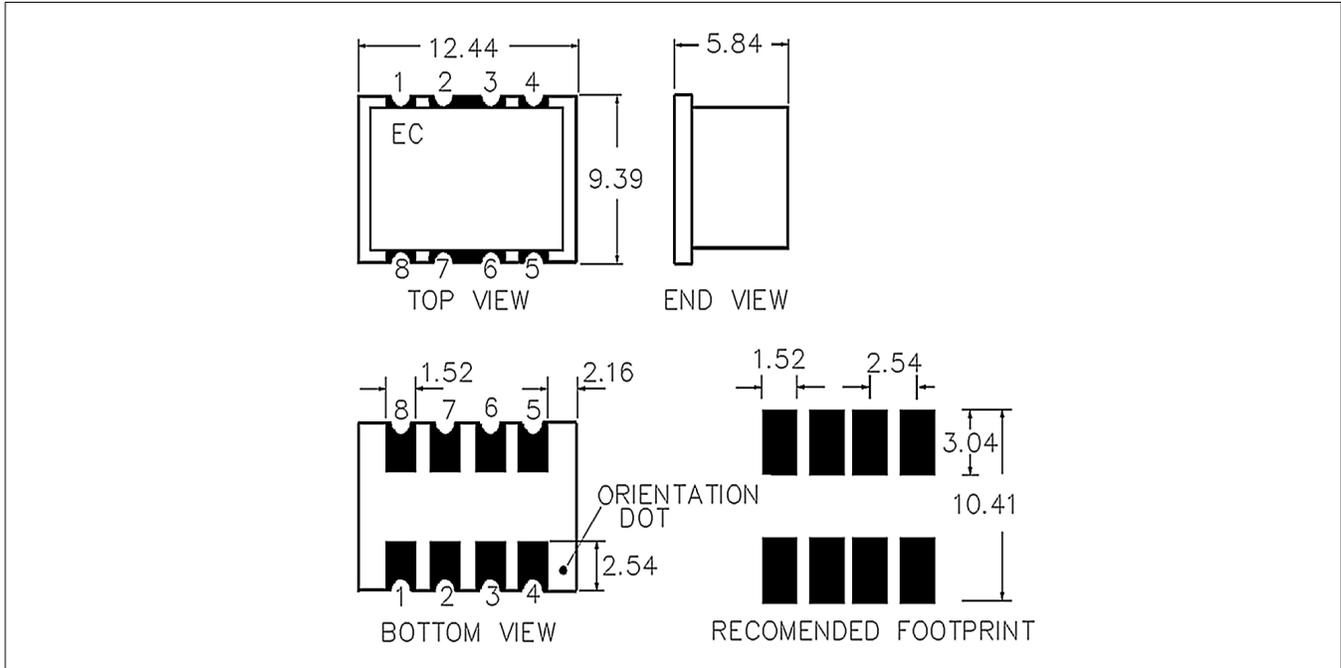
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## Case Style: SM-4



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

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