

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

Rev. V4

Features

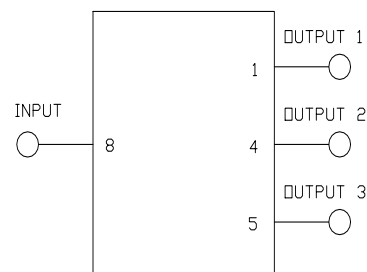
- Surface Mount
- 75 Ohms
- RoHS Compliant
- RoHS version of ESSM-3-1-75

Description

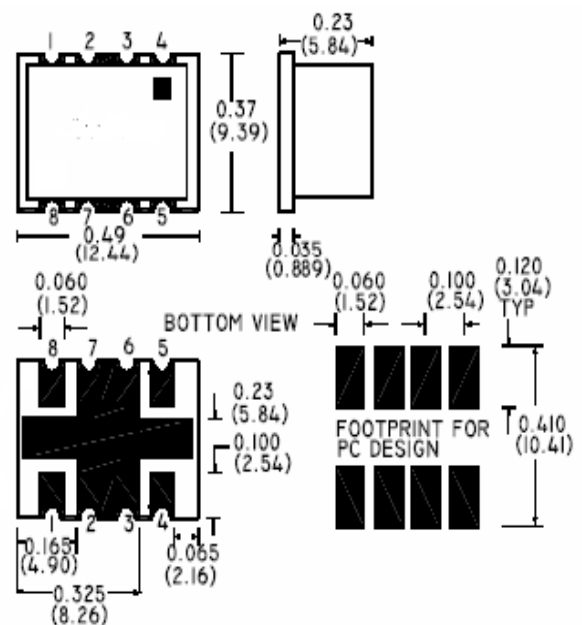
M/A-COM's MAPD-008109-C30040 is a 3 Way 0° Power Divider in a low cost, surface mount package. Ideally suited for high volume CATV applications.



Schematic



Case Style: SM-4



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

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

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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

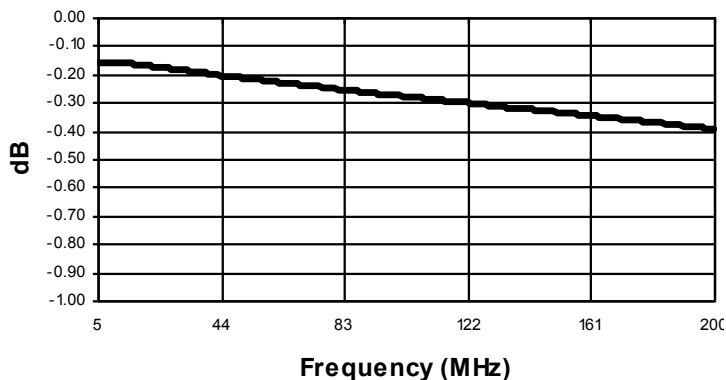
1. Exceeding any one or combination of these limits may cause permanent damage to this device.
2. M/A-COM does not recommend sustained operation near these survivability limits.

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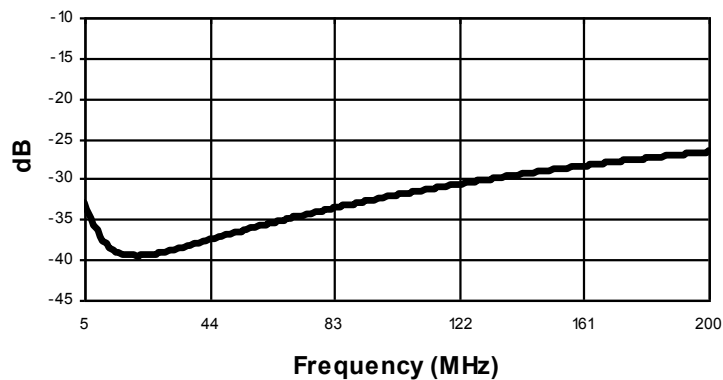
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Typical Performance Curves $T_A = 25^\circ\text{C}$, $Z_0 = 75\Omega$

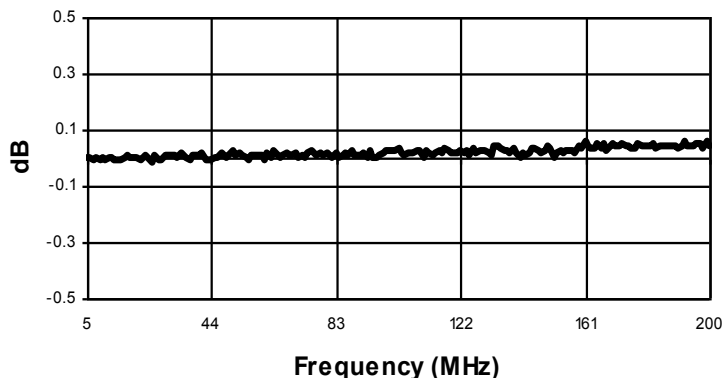
Insertion Loss: Reference Value -4.77dB



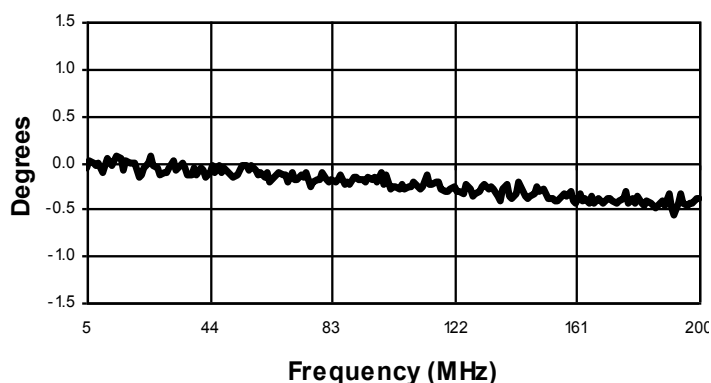
Isolation



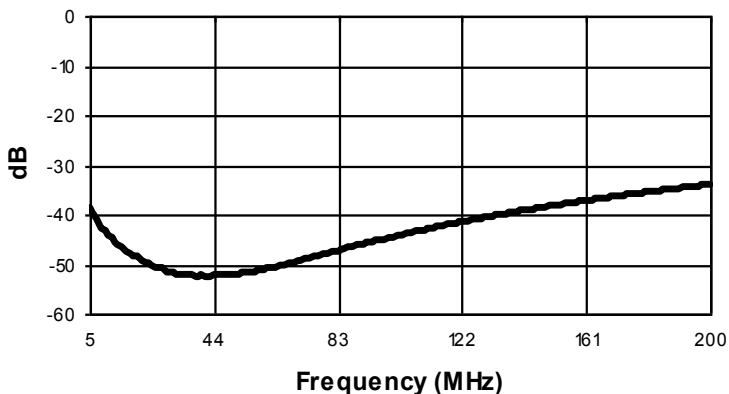
Amplitude Unbalance



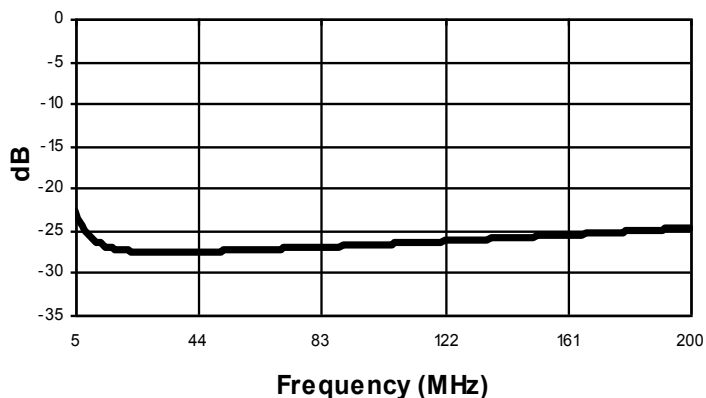
Phase Unbalance



Return Loss: Input



Return Loss: Output



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