

## Features

- Surface Mount
- Typical Coupling 13dB
- RoHS\* Compliant, lead free
- RoHS version of EMDC-13-1-75
- 260°C Reflow Compatible
- Available on Tape and Reel

## Description

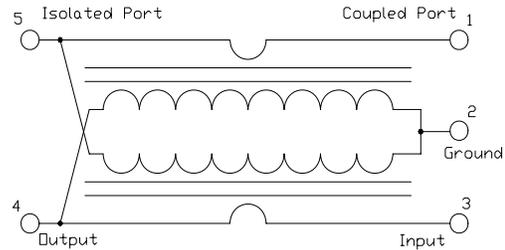
M/A-COM's MACP-009736-CD0160 is a high performance 75 Ohm Coupler, in a SM-22 low cost, surface mount package. The MACP-009736-CD0160 is designed for use in high volume CATV applications. Typical applications include Set-top Boxes, Network Interface Units, Broadband Amplifiers and Headend equipment.



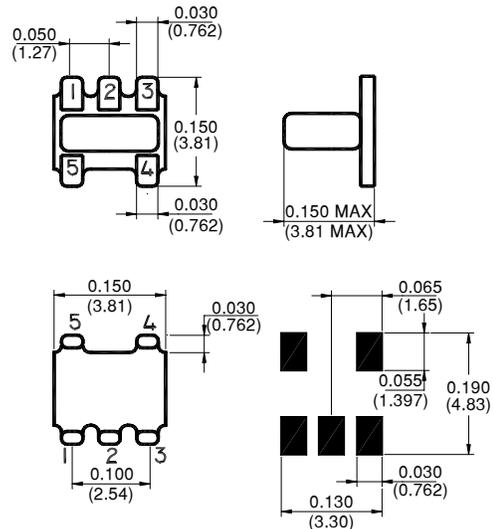
## Pin configuration

Pin no.	Function
1	Coupled
2	Ground
3	Input
4	Output
5	External 75 Ω

## Schematic



## Case style: SM-22



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

## Ordering information

Part number	Description
MACP-009736-CD0160	2000 piece reel
MACP-009736-CD01TB	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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- **North America** Tel: 800.366.2266 / Fax: 978.366.2266
- **Europe** Tel: 44.1908.574.200 / Fax: 44.1908.574.300
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## Electrical Specifications@ 25°C

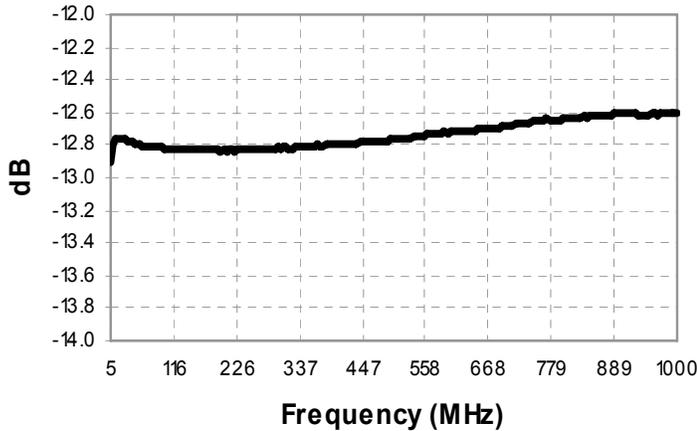
Frequency Range 5 - 1000 MHz	Units	Nominal	Typical	Minimum	Maximum
Mainline Loss					
5 - 50 MHz	dB	—	1.5	—	2.2
50 - 500 MHz	dB	—	1.3	—	2.0
500 - 1000 MHz	dB	—	1.3	—	2.0
Coupling					
5 - 1000 MHz	dB	13 ± 1.1	—	—	—
Coupling Flatness	dB	—	—	—	0.9
Directivity					
5 - 50 MHz	dB	—	25	20	—
50 - 500 MHz	dB	—	20	15	—
500 - 1000 MHz	dB	—	13	7	—
Return Loss, all Ports					
5 - 1000 MHz	dB	—	14	8	—

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

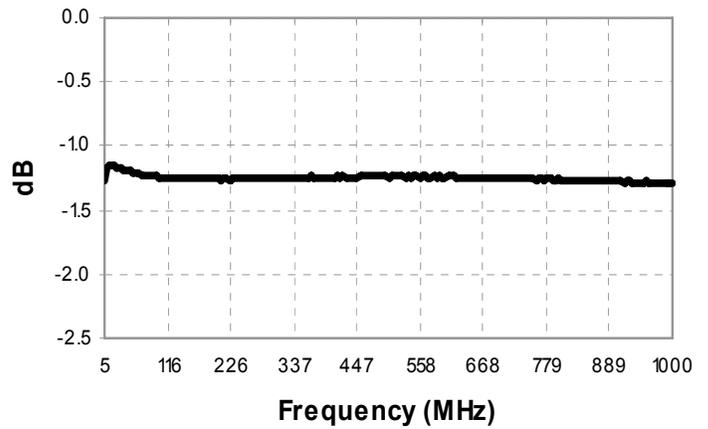
Parameter	Value
RF power	250mW
DC current	30mA
Operating Temperature	-40°C to +85°C
Storage Temperature	-40°C to +85°C

Typical Performance Curves:  $T_A = 25^\circ\text{C}$ ,  $0\text{dBm}$ ,  $Z_0 = 75\Omega$ ,  $P_{in} = 0\text{dBm}$

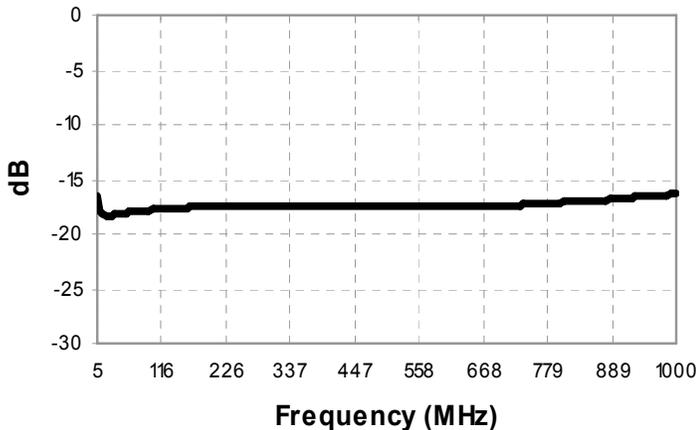
### Coupling



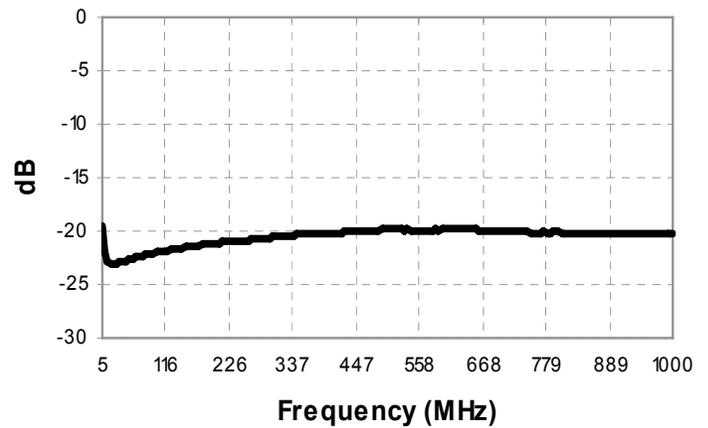
### Main Line Loss



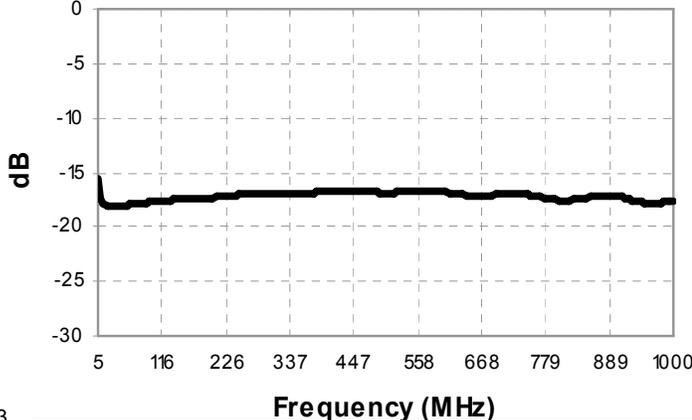
### Return Loss: Input



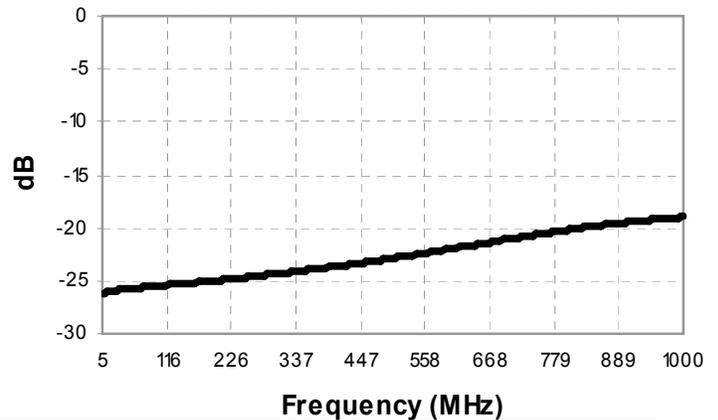
### Return Loss: Output



### Return Loss: Coupled



### Directivity



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