

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

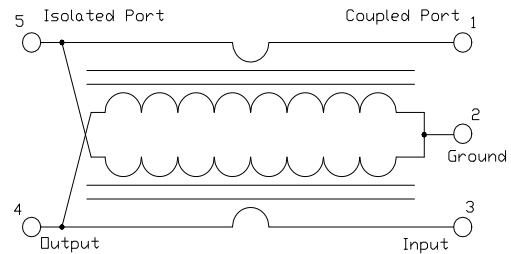
M/A-COM's MACP-009736-CD0160 is a high performance 75 Ohm Coupler, in a SM-22 low cost, surface mount package. The MACP-009736-CD0160 is designed for use in high volume CATV applications. Typical applications include Set-top Boxes, Network Interface Units, Broadband Amplifiers and Headend equipment.



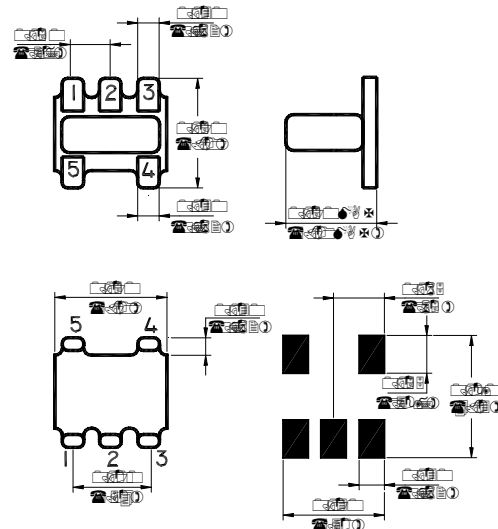
Pin configuration

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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ADVANCED: Data Sheets contain information regarding a product M/A-COM Technology Solutions is considering for development. Performance is based on target specifications, simulated results, and/or prototype measurements. Commitment to develop is not guaranteed.
PRELIMINARY: Data Sheets contain information regarding a product M/A-COM Technology Solutions has under development. Performance is based on engineering tests. Specifications are typical. Mechanical outline has been fixed. Engineering samples and/or test data may be available.

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Electrical Specifications@ 25°C

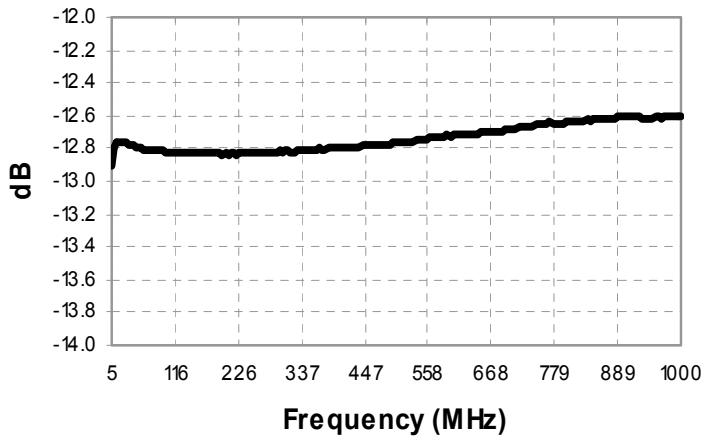
Frequency Range 5 - 1000 MHz	Units	Nominal	Typical	Minimum	Maximum
Mainline Loss					
5 - 50 MHz	dB	—	1.5	—	2.2
50 - 500 MHz	dB	—	1.3	—	2.0
500 - 1000 MHz	dB	—	1.3	—	2.0
Coupling					
5 - 1000 MHz	dB	13 ± 1.1	—	—	—
Coupling Flatness	dB	—	—	—	0.9
Directivity					
5 - 50 MHz	dB	—	25	20	—
50 - 500 MHz	dB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

Recommended Maximum Ratings ^{1,2}

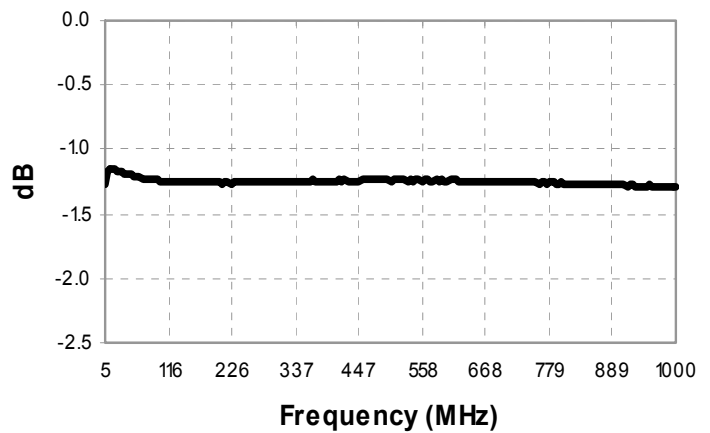
Parameter	Value
RF power	250mW
DC current	30mA
Operating Temperature	-40°C to +85°C
Storage Temperature	-40°C to +85°C

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

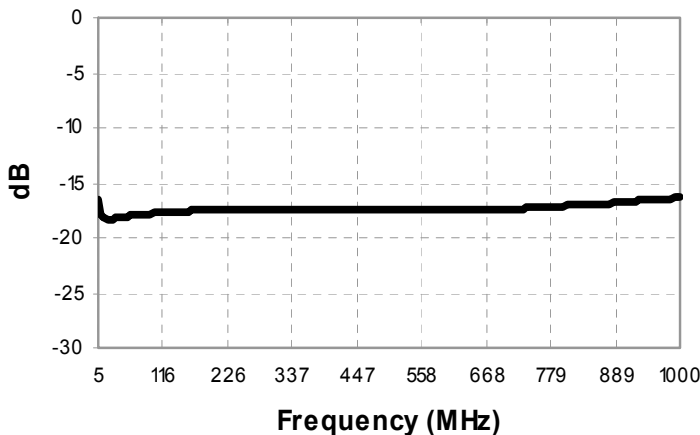
Coupling



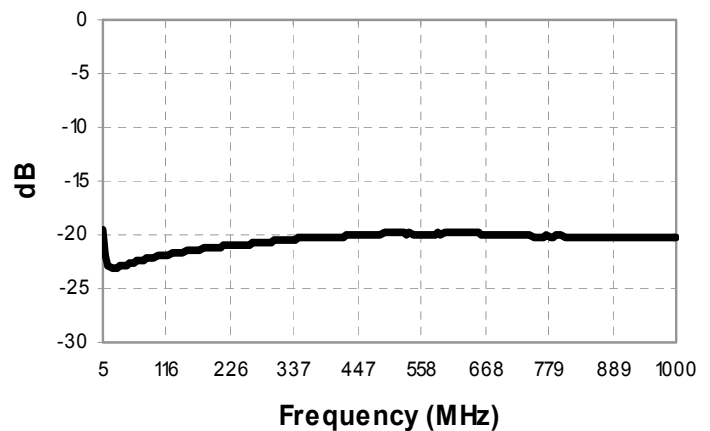
Main Line Loss



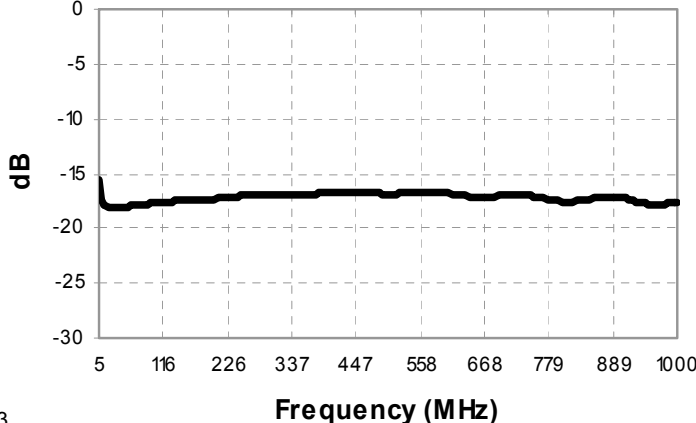
Return Loss: Input



Return Loss: Output



Return Loss: Coupled



Directivity

