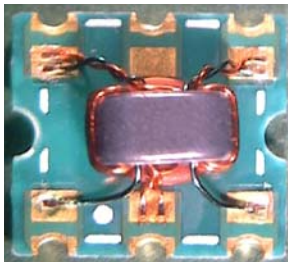


## Features

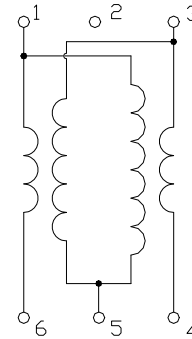
- Surface mount
- 6dB Coupler
- 260°C reflow compatible
- RoHS\* compliant, lead-free
- Available on tape and reel.

## Description

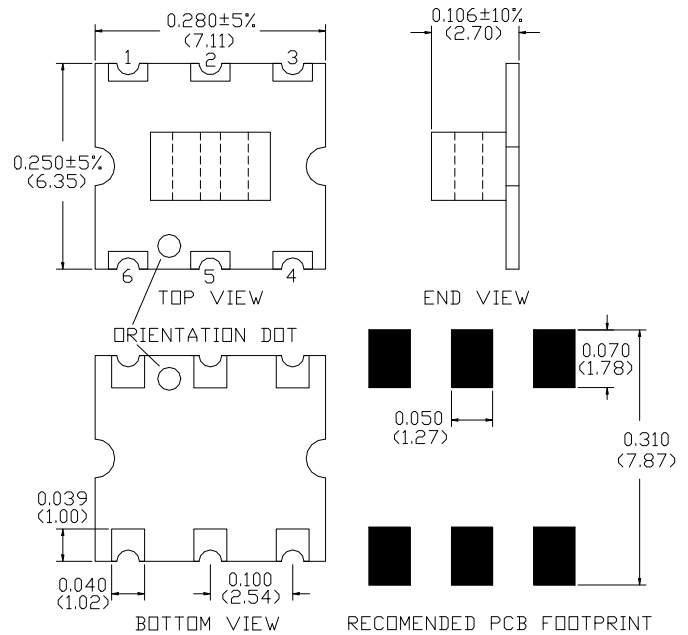
M/A Com's MACP-009730-C60370 is a 6dB coupler in a low cost, surface mount package. Excellent coupling flatness. Ideally suited for broadband CATV applications.



## Schematic



## Case style: SM-55



## Pin configuration

Pin no.	Function
1	Output
2	Ground (Not used)
3	Isolated (75Ω termination)
4	Coupled
5	Ground
6	Input

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

## Ordering information

Part number	Description
MACP-009730-C60370	900 piece reel
MACP-009730-C603TB	Customer Test Board

Note: Reference Application Note **M513** for reel size information.

\* Restrictions on Hazardous Substances, European Union Directive 2002/95/EC.

1

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

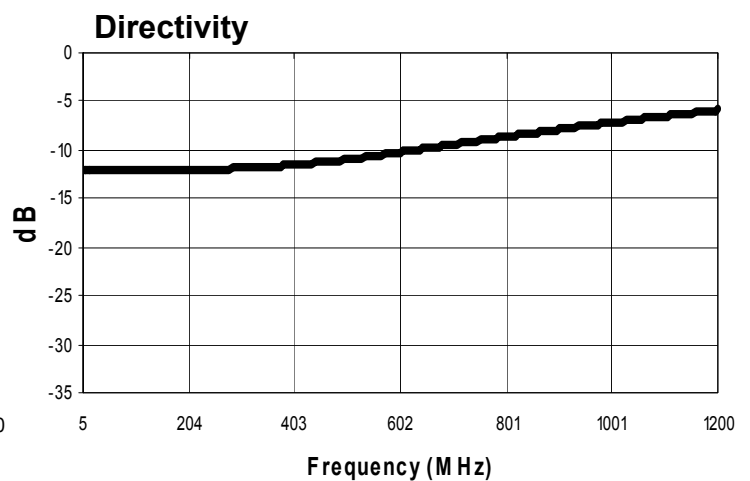
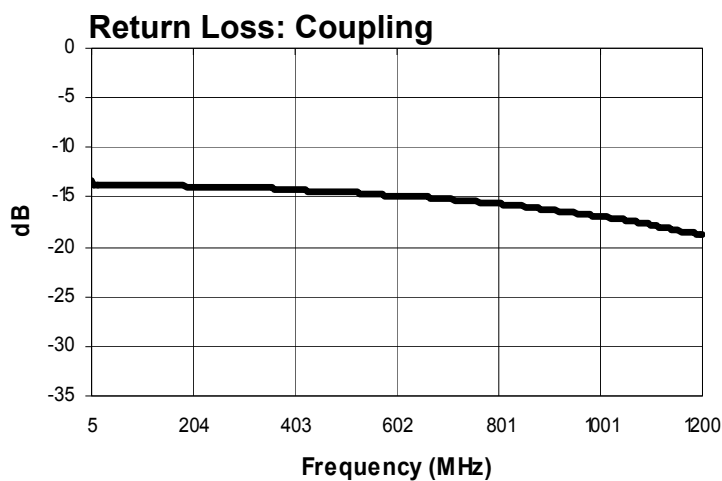
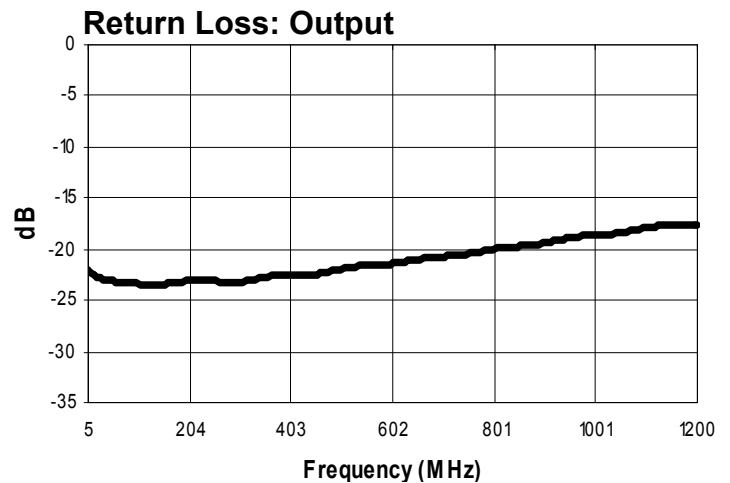
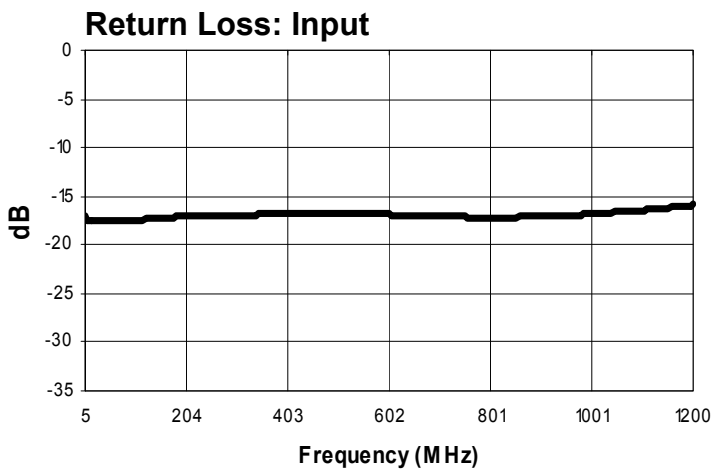
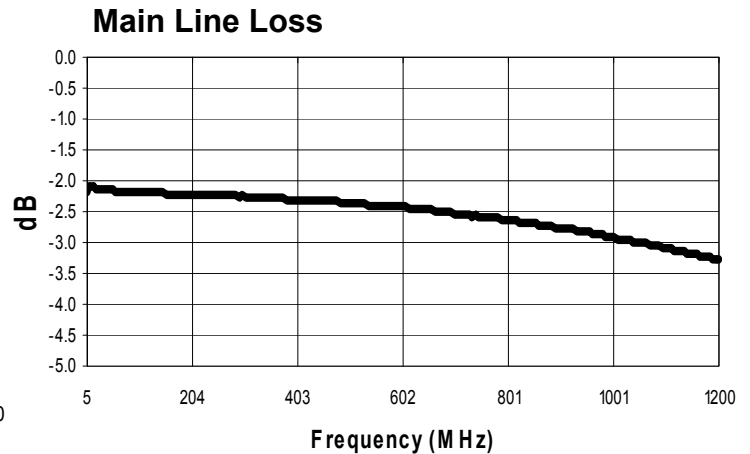
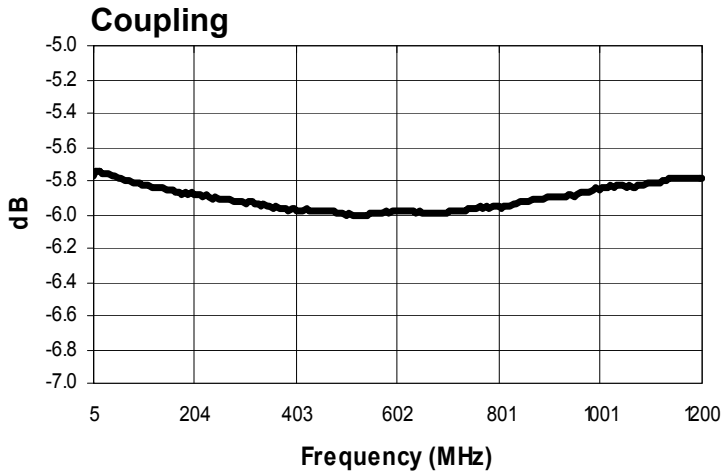
Parameter	Test Conditions	Units	Min	Typ	Max
Coupling	5 - 1200 MHz	dB	-	5.8	$\pm 0.5$
Main Line Loss	5 - 400 MHz	dB	-	2.3	2.5
	400 - 870 MHz	dB	-	2.5	3.0
	870 - 1000 MHz	dB	-	2.9	3.3
	1000 - 1200MHz	dB	-	3.3	4.0
Directivity	5 - 50 MHz	dB	11	12	-
	50 - 600 MHz	dB	7.0	10	-
	600 - 1000 MHz	dB	3.0	7.2	-
Input Return Loss	5 - 500MHz	dB	15	17	-
	500 - 1000 MHz	dB	11	17	-
Output Return Loss	5 - 500 MHz	dB	19	23	-
	500 - 1000 MHz	dB	13	18	-
Coupling Return Loss	5 - 500 MHz	dB	12	14	-
	500 - 1000 MHz	dB	9.0	12	-

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

Parameter	Absolute maximum
RF power	250mW
DC current	30mA
Operating Temperature	-40°C to +85°C
Storage 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:  $T_A = 25^\circ\text{C}$ ,  $0\text{dBm}$ ,  $Z_0 = 75\Omega$ ,  $P_{in} = 0\text{dBm}$



3

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