



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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## Features

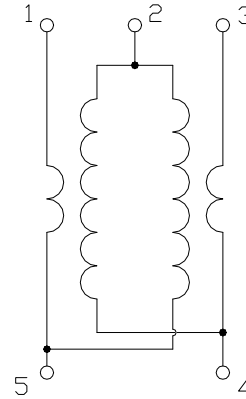
- Surface mount
- 10dB Coupler
- 260°C reflow compatible
- RoHS\* compliant, lead-free
- Available on tape and reel.

## Description

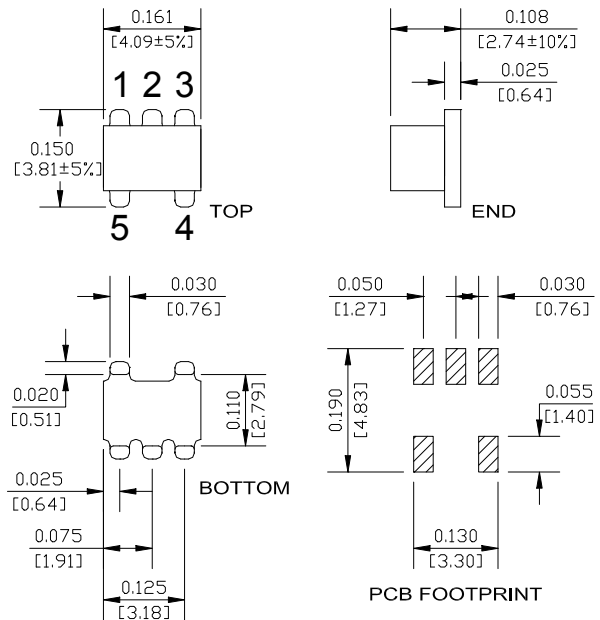
M/A Com's MACP-009596-CA0160 is a 10dB coupler in a low cost, surface mount package. Excellent coupling flatness. Ideally suited for broadband CATV applications.



## Schematic



## Case style: SM-22



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

## Pin configuration

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

## Ordering information

Part number	Description
MACP-009596-CA0160	2000 piece reel
MACP-009596-CA01TB	Customer Test Board

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

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

**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 - 1000 MHz	dB	-	10	$\pm 0.5$
Main Line Loss	5 - 50 MHz	dB	-	1.1	1.4
	50 - 500 MHz	dB	-	1.3	1.5
	500 - 1000 MHz	dB	-	1.4	1.7
Directivity	5 - 50 MHz	dB	20	22	-
	50 - 600 MHz	dB	16	20	-
	600 - 1000 MHz	dB	14	18	-
Input Return Loss	5 - 1000 MHz	dB	12	18	-
Output Return Loss	5 - 1000 MHz	dB	12	23	-
Coupling Return Loss	5 - 1000 MHz	dB	12	16	-

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

Parameter	Absolute maximum
RF power	250mW
DC current	30mA
Operating Temperature	-20°C to +80°C
Storage Temperature	-20°C to +80°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:  $T_A = 25^\circ\text{C}$ ,  $0\text{dBm}$ ,  $Z_0 = 75\Omega$ ,  $P_{in} = 0\text{dBm}$**

