MACP-009596-CA0160

E-Series Coupler
5 to 1000 MHz

M/A-COM Products
Rev. V1

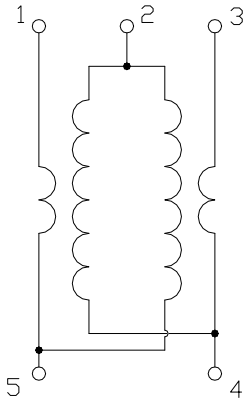
Features

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

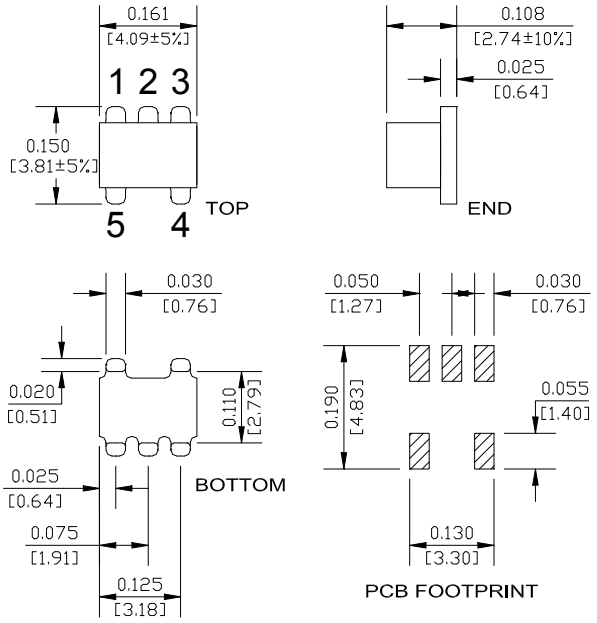
Description

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.

• **North America** Tel: 800.366.2266 • **Europe** Tel: +353.21.244.6400
• **India** Tel: +91.80.4155721 • **China** Tel: +86.21.2407.1588
Visit www.macomtech.com for additional data sheets and product information.

Electrical Specifications: T_A = 25°C, 0dBm, Z_0 = 75Ω, P_{in} = 0dBm

Parameter	Test Conditions	Units	Min	Typ	Max
Coupling	5 - 1000 MHz	dB	-	10	±0.5
Main Line Loss	5 - 50 MHz 50 - 500 MHz 500 - 1000 MHz	dB dB dB	- - -	1.1 1.3 1.4	1.4 1.5 1.7
Directivity	5 - 50 MHz 50 - 600 MHz 600 - 1000 MHz	dB dB dB	20 16 14	22 20 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	-

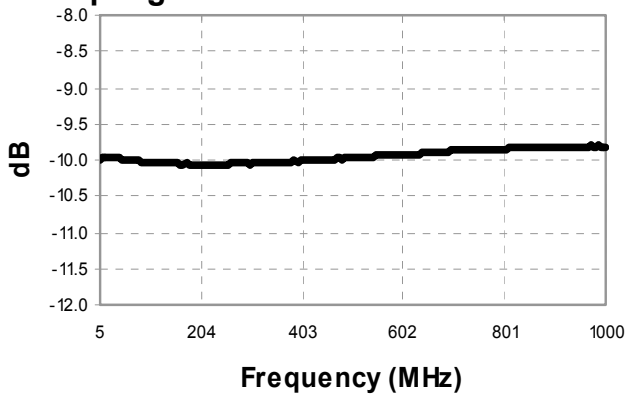
Absolute Maximum Ratings [1,2]

Parameter	Absolute maximum
RF power	250mW
DC current	30mA
Operating Temperature	-20°C to +80°C
Storage Temperature	-20°C to +80°C

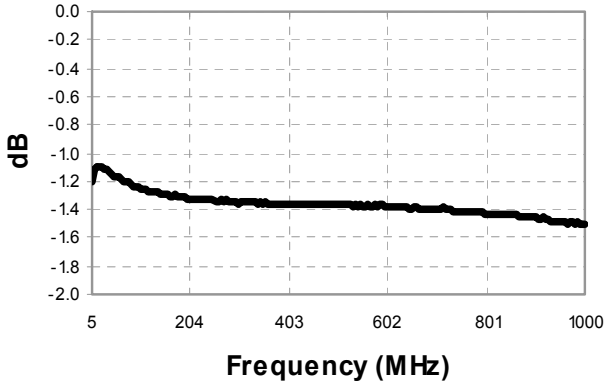
1. Exceeding any one or combination of these limits may cause permanent damage to this device.
2. M/A-COM does not recommend sustained operation near these survivability limits.

Typical Performance Curves: T_A = 25°C, 0dBm, Z_0 = 75Ω, P_{in} = 0dBm

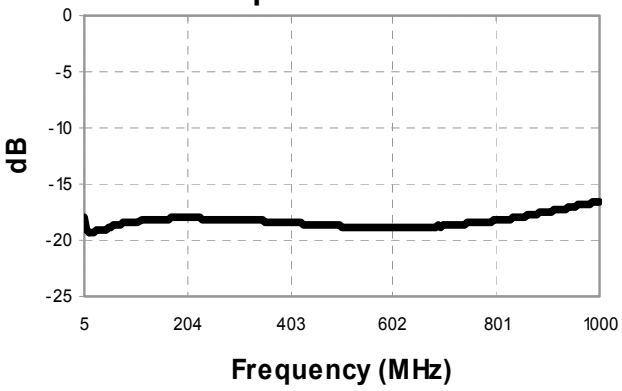
Coupling



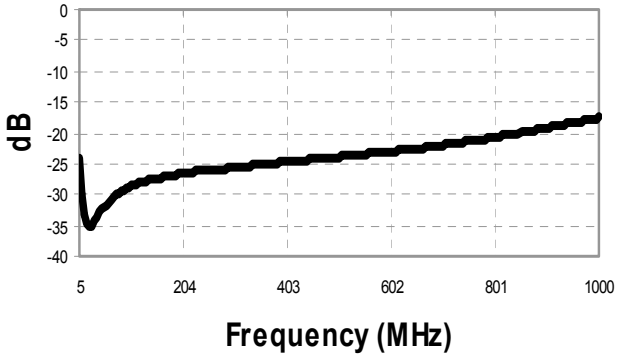
Main Line Loss



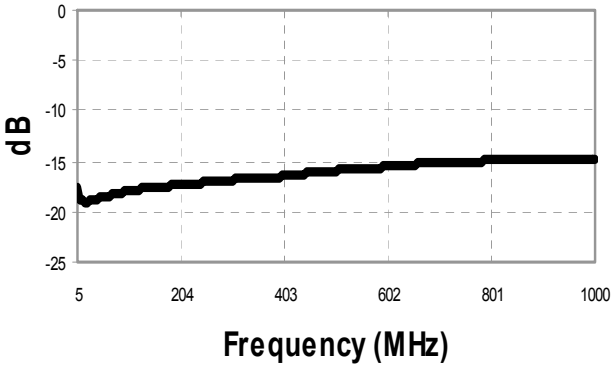
Return Loss: Input



Return Loss: Output



Return Loss: Coupling



Directivity