MACP-009598-C80160

E-Series Coupler
5 to 900 MHz

M/A-COM Products
Rev. V1

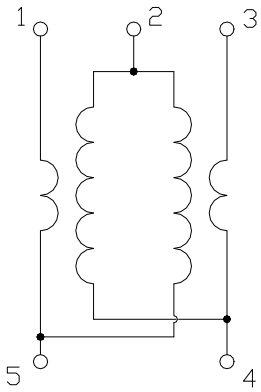
Features

- Surface mount
- 8.5dB Coupler
- 260°C reflow compatible
- RoHS* compliant, lead-free
- Available on tape and reel

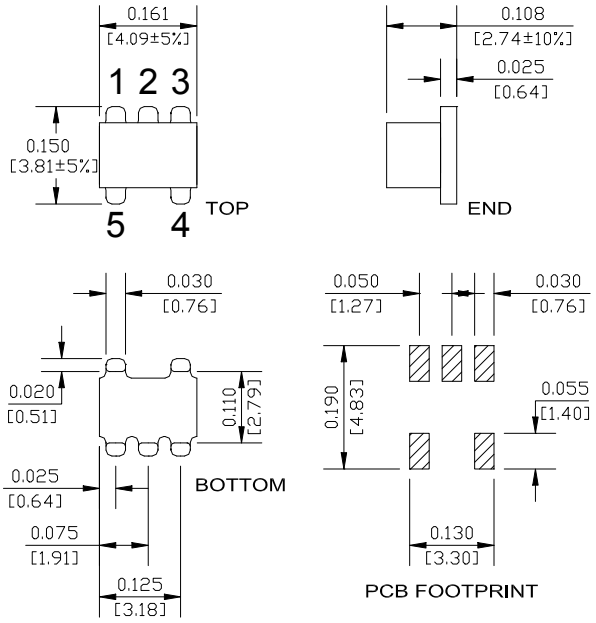
Description

M/A Com's MACP-009598-C80160 is an 8.5dB coupler in a low cost, surface mount package. 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

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

Ordering information

Part number	Description
MACP-009598-C80160	2000 piece reel
MACP-009598-C801TB	Customer Test Board

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

- **North America** Tel: 800.366.2266 / Fax: 978.366.2266
- **Europe** Tel: 44.1908.574.200 / Fax: 44.1908.574.300
- **Asia/Pacific** Tel: 81.44.844.8296 / Fax: 81.44.844.8298

Visit www.macom.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 - 900 MHz	dB	-	8.5	±0.3
Main Line Loss	5 - 50 MHz 50 - 450 MHz 450 - 900 MHz	dB dB dB	- - -	1.6 1.9 2.0	2.2 2.0 2.2
Isolation	5 - 900 MHz	dB	22	26	-
Directivity	5 - 50 MHz 450 - 900 MHz	dB dB	15 13	17.9 16.4	- -
Return Loss Input (P3)	5 - 900 MHz	dB	13	15	-
Return Loss Coupled (P1)	5 - 900 MHz	dB	13	15	-
Return Loss Output (P4)	5 - 900 MHz	dB	16	23	-
Return Loss Isolation (P5)	5 - 900 MHz	dB	15	21	-

Absolute Maximum Ratings [1,2]

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.

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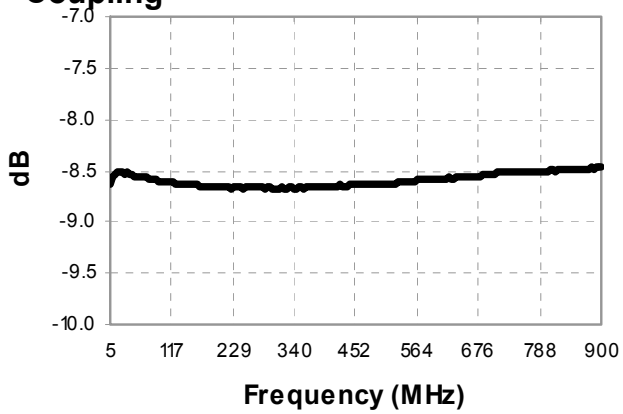
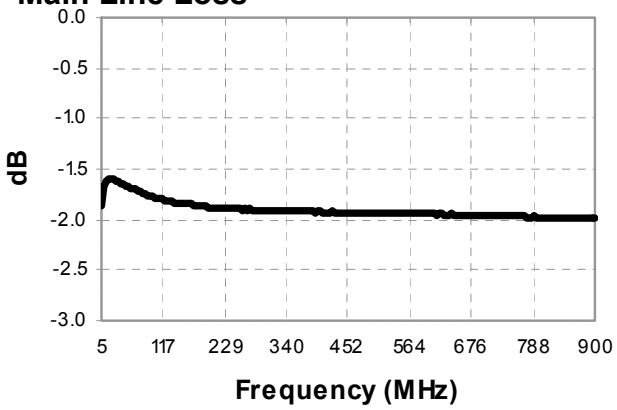
Typical Performance Curves: T_A = 25°C, 0dBm, Z_0 = 75Ω, P_{in} = 0dBm

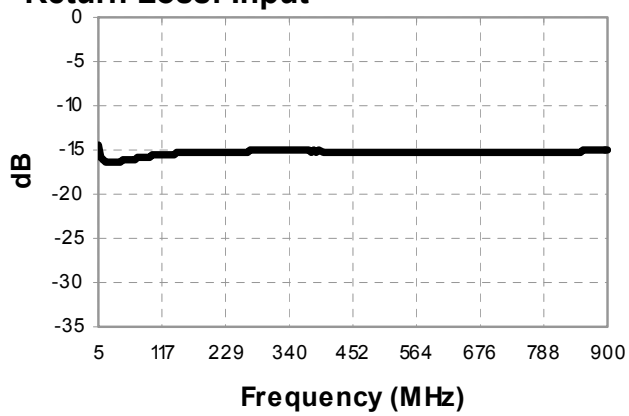
Coupling



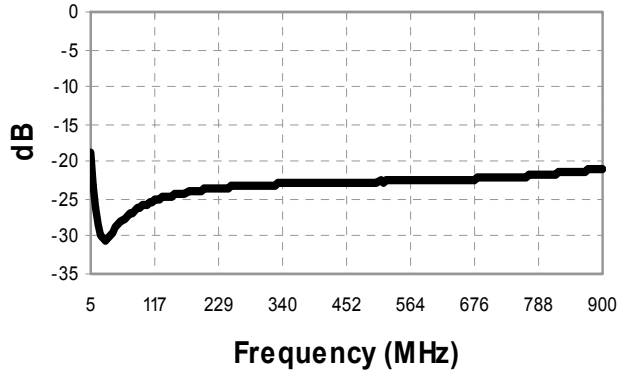
Main Line Loss



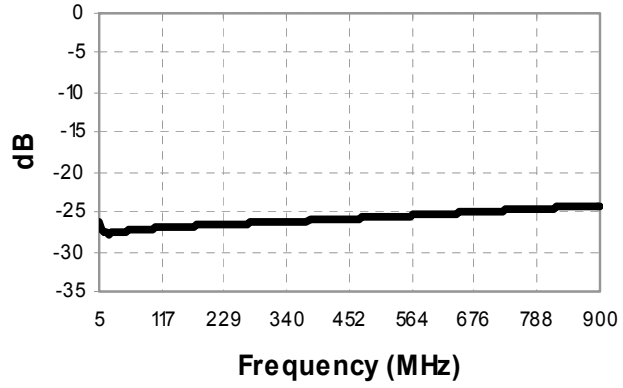
Return Loss: Input



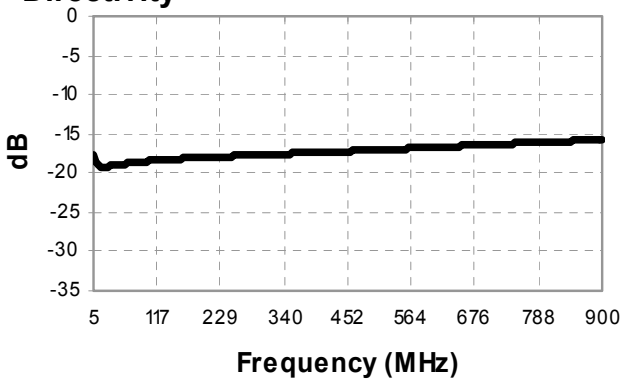
Return Loss: Output



Isolation



Directivity



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