## 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.

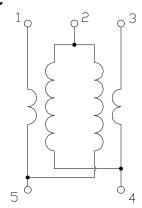


### Pin configuration

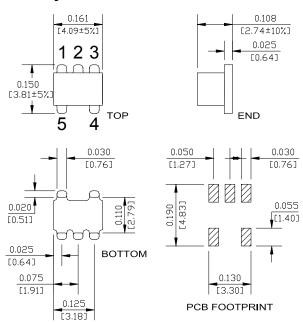
Pin no.	Function	
1	Coupled	
2	Ground	
3	Input	
4	Output	
5	External 75 Ω	

Note: Reference Application Note  $\boldsymbol{M513}$  for reel size information.

#### **Schematic**



#### Case style: SM-22



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

### 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.

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- **Europe** Tel: 44.1908.574.200 / Fax: 44.1908.574.300
- Asia/Pacific Tel: 81.44.844.8296 / Fax: 81.44.844.8298
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### Electrical Specifications: $T_A = 25$ °C, 0dBm, $Z_0 = 75\Omega$ , $P_{in} = 0$ dBm

Parameter	Test Conditions	Units	Min	Тур	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		

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

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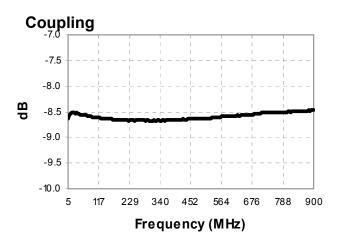
# MACP-009598-C80160

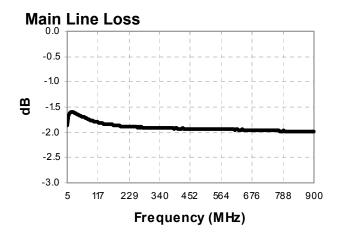


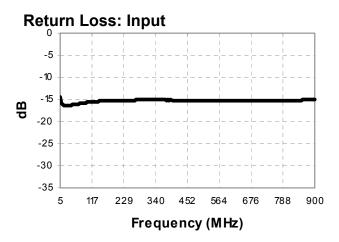
E-Series Coupler 5 to 900 MHz

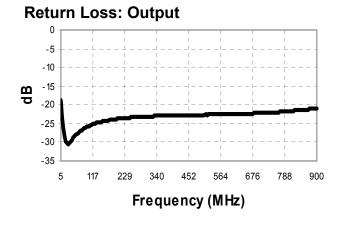
M/A-COM Products Rev. V1

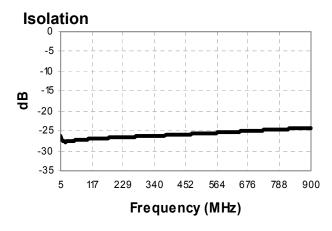
## Typical Performance Curves: $T_A = 25$ °C, 0dBm, $Z_0 = 75\Omega$ , $P_{in} = 0$ dBm

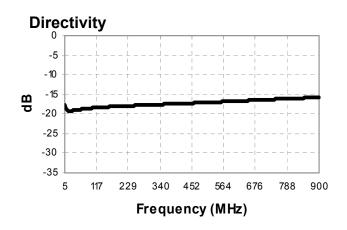












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