

E-Series 75 Ohm 8 dB Coupler 5 - 1200 MHz

Rev. V3

Features

- · Coupling 8dB Typical
- Surface Mount
- Low Profile
- · Available on Tape and Reel
- Excellent Temperature Stability

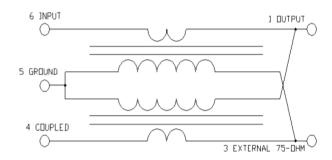
Description

The MACP-009011-C80370 is a high performance 75 Ohm coupler, in a SM-55A low cost, surface mount package.

The MACP-009011-C80370 is designed for use in high volume CATV applications. Typical applications include set-top boxes, network interface units, broadband amplifiers and head-end equipment.



Functional Schematic



Ordering Information

Part Number	Function
MACP-009011-C80370	900 parts per reel
MACP-009011-C803TB	Customer test board

Pin Configuration

Pin No.	Function		
1	Output		
2	Not Connected		
3	Isolation, external 75-Ohm		
4	Coupled		
5	Ground		
6	Input		



E-Series 75 Ohm 8 dB Coupler 5 - 1200 MHz

Rev. V3

Electrical Specifications: Freq. = 5 - 1200 MHz, $T_A = 25$ °C, $Z_0 = 75 \Omega$

Parameter	Test Conditions	Units	Min.	Тур.	Max.
Mainline Loss	5 - 870 MHz 870 - 1002 MHz 1002 - 1200 MHz	dB	2.0 2.3 2.6	1.50 1.85 2.10	_
Coupling	5 - 1002 MHz 1002 - 1200 MHz	dB	8.5 8.7	8.3 8.0	7.5 7.3
Coupling flatness	5 - 1200 MHz	dB	_	0.5	8.0
Directivity	5 - 870 MHz 870 - 1200 MHz	dB	_	17.5 12.8	11 9
Return Loss Input	5 - 50 MHz 50 - 1200MHz	dB		18.8 18.7	17.0 16.5
Return Loss Output	5 - 50 MHz 50 - 870 MHz 870 - 1200 MHz	dB		31.3 33.5 32.0	23 20 20
Return Loss Coupled	5 - 1200 MHz	dB	_	18.5	16

Absolute Maximum Ratings

Parameter	Absolute Maximum	
RF Power	250 mW	
DC Current	30 mA	
Operating Temperature	-20°C to + 85°C	
Storage Temperature	-20°C to + 85°C	



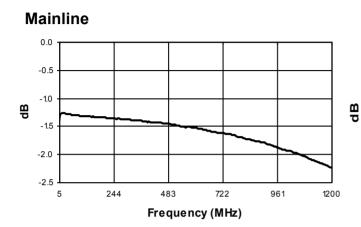
961

1200

E-Series 75 Ohm 8 dB Coupler 5 - 1200 MHz

Rev. V3

Typical Performance Curves: $T_A = 25^{\circ}C$, $Z_0 = 75 \Omega$

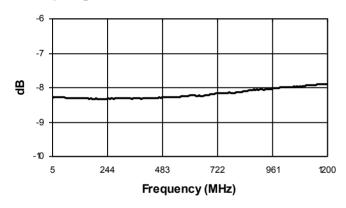


0 -5 -10 -15 -20 -25

Frequency (MHz)

483

Coupling



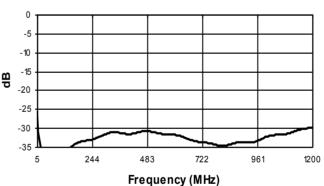
Return Loss: Output

244

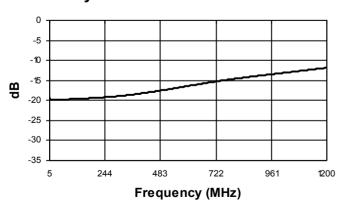
Return Loss:

-30 -35

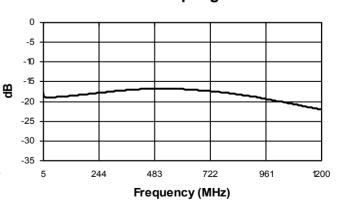
5



Directivity



Return Loss: Coupling

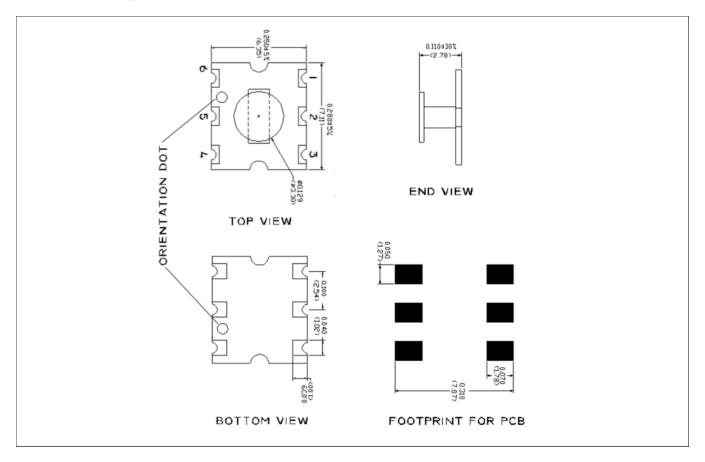




E-Series 75 Ohm 8 dB Coupler 5 - 1200 MHz

Rev. V3

Outline Drawing





E-Series 75 Ohm 8 dB Coupler 5 - 1200 MHz

Rev. V3

MACOM Technology Solutions Inc. All rights reserved.

Information in this document is provided in connection with MACOM Technology Solutions Inc ("MACOM") products. These materials are provided by MACOM as a service to its customers and may be used for informational purposes only. Except as provided in MACOM's Terms and Conditions of Sale for such products or in any separate agreement related to this document, MACOM assumes no liability whatsoever. MACOM assumes no responsibility for errors or omissions in these materials. MACOM may make changes to specifications and product descriptions at any time, without notice. MACOM makes no commitment to update the information and shall have no responsibility whatsoever for conflicts or incompatibilities arising from future changes to its specifications and product descriptions. No license, express or implied, by estoppels or otherwise, to any intellectual property rights is granted by this document.

THESE MATERIALS ARE PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, RELATING TO SALE AND/OR USE OF MACOM PRODUCTS INCLUDING LIABILITY OR WARRANTIES RELATING TO FITNESS FOR A PARTICULAR PURPOSE, CONSEQUENTIAL OR INCIDENTAL DAMAGES, MERCHANTABILITY, OR INFRINGEMENT OF ANY PATENT, COPYRIGHT OR OTHER INTELLECTUAL PROPERTY RIGHT. MACOM FURTHER DOES NOT WARRANT THE ACCURACY OR COMPLETENESS OF THE INFORMATION, TEXT, GRAPHICS OR OTHER ITEMS CONTAINED WITHIN THESE MATERIALS. MACOM SHALL NOT BE LIABLE FOR ANY SPECIAL, INDIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, INCLUDING WITHOUT LIMITATION, LOST REVENUES OR LOST PROFITS, WHICH MAY RESULT FROM THE USE OF THESE MATERIALS.

MACOM products are not intended for use in medical, lifesaving or life sustaining applications. MACOM customers using or selling MACOM products for use in such applications do so at their own risk and agree to fully indemnify MACOM for any damages resulting from such improper use or sale.

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Signal Conditioning category:

Click to view products by MACOM manufacturer:

Other Similar products are found below:

MAPDCC0001 MAPDCC0004 PD0409J5050S2HF 880157 HHS-109-PIN DC1417J5005AHF AFS14A30-2185.00-T3 AFS14A35-1591.50-T3 DS-323-PIN B39321R801H210 1A0220-3 JP510S LFB212G45SG8C341 LFB322G45SN1A504 LFL182G45TC3B746 SF2159E 30057 FM-104-PIN CER0813B MAPDCC0005 3A325 40287 41180 ATB3225-75032NCT BD0810N50100AHF BD2425J50200AHF C5060J5003AHF JHS-115-PIN JP503AS DC0710J5005AHF DC2327J5005AHF DC3338J5005AHF 43020 LFB2H2G60BB1C106 LFL15869MTC1B787 X3C19F1-20S XC3500P-20S 10013-20 SF2194E CDBLB455KCAX39-B0 TGL2208-SM, EVAL RF1353C PD0922J5050D2HF 1E1305-3 1G1304-30 B0922J7575AHF 2020-6622-20 TP-102-PIN TP-103-PIN BD1222J50200AHF