

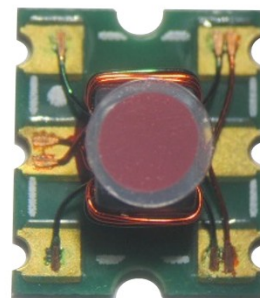
Features

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

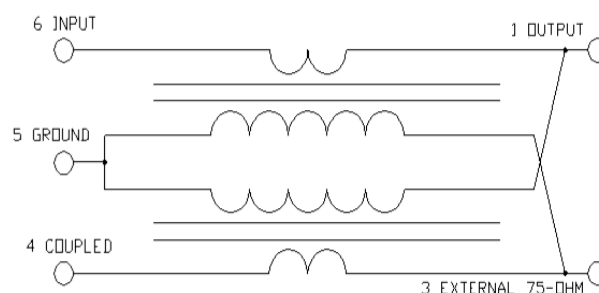
Description

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, $T_A = 25^\circ\text{C}$, $Z_0 = 75\ \Omega$

Parameter	Test Conditions	Units	Min.	Typ.	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	0.8
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

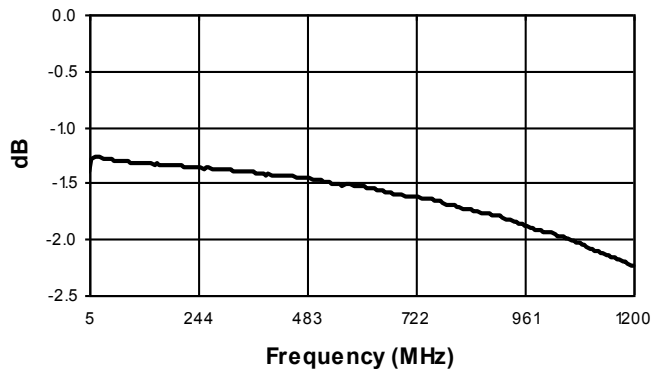
Parameter	Absolute Maximum
RF Power	250 mW
DC Current	30 mA
Operating Temperature	-20°C to + 85°C
Storage Temperature	-20°C to + 85°C

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

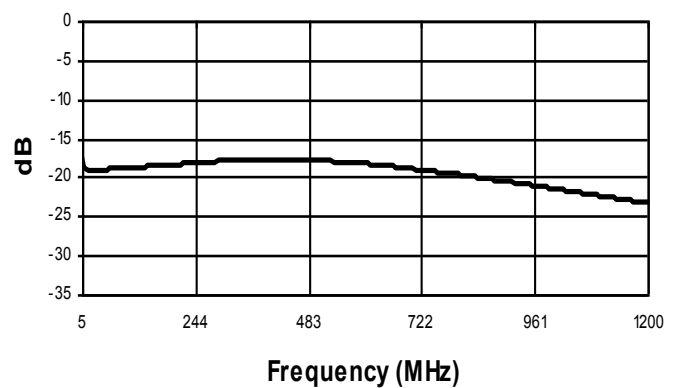
Rev. V3

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

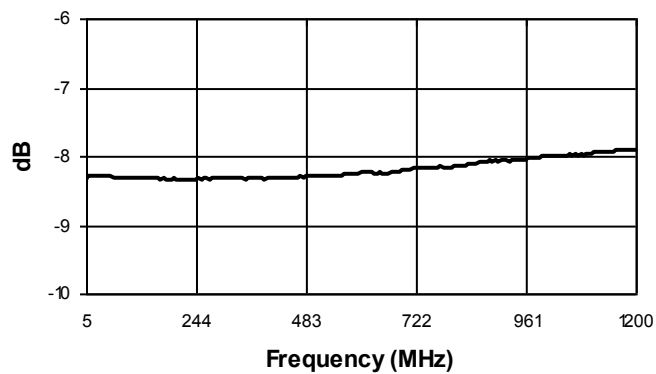
Mainline



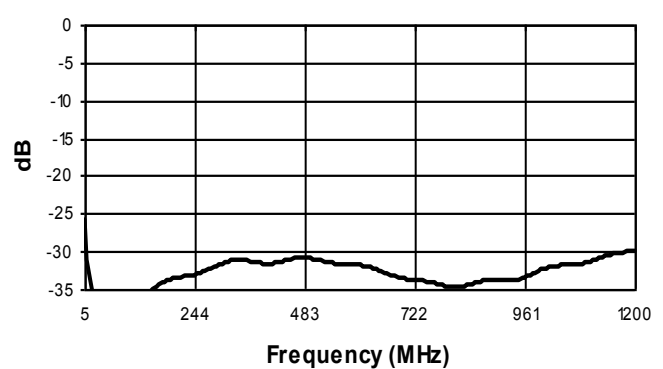
Return Loss:



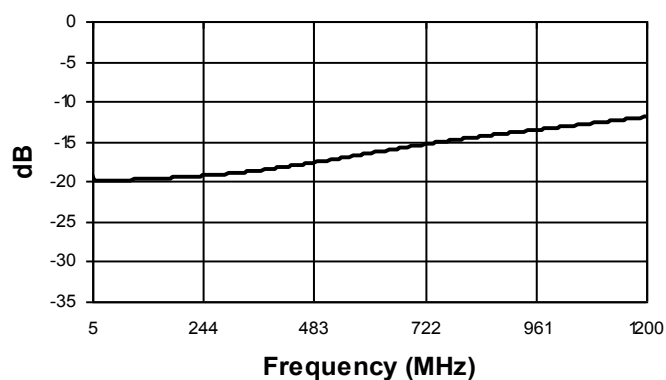
Coupling



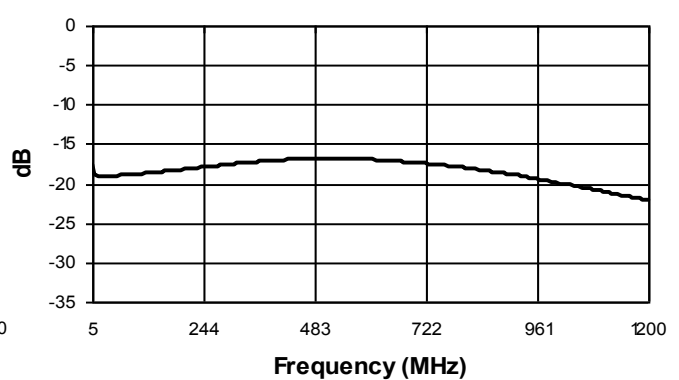
Return Loss: Output



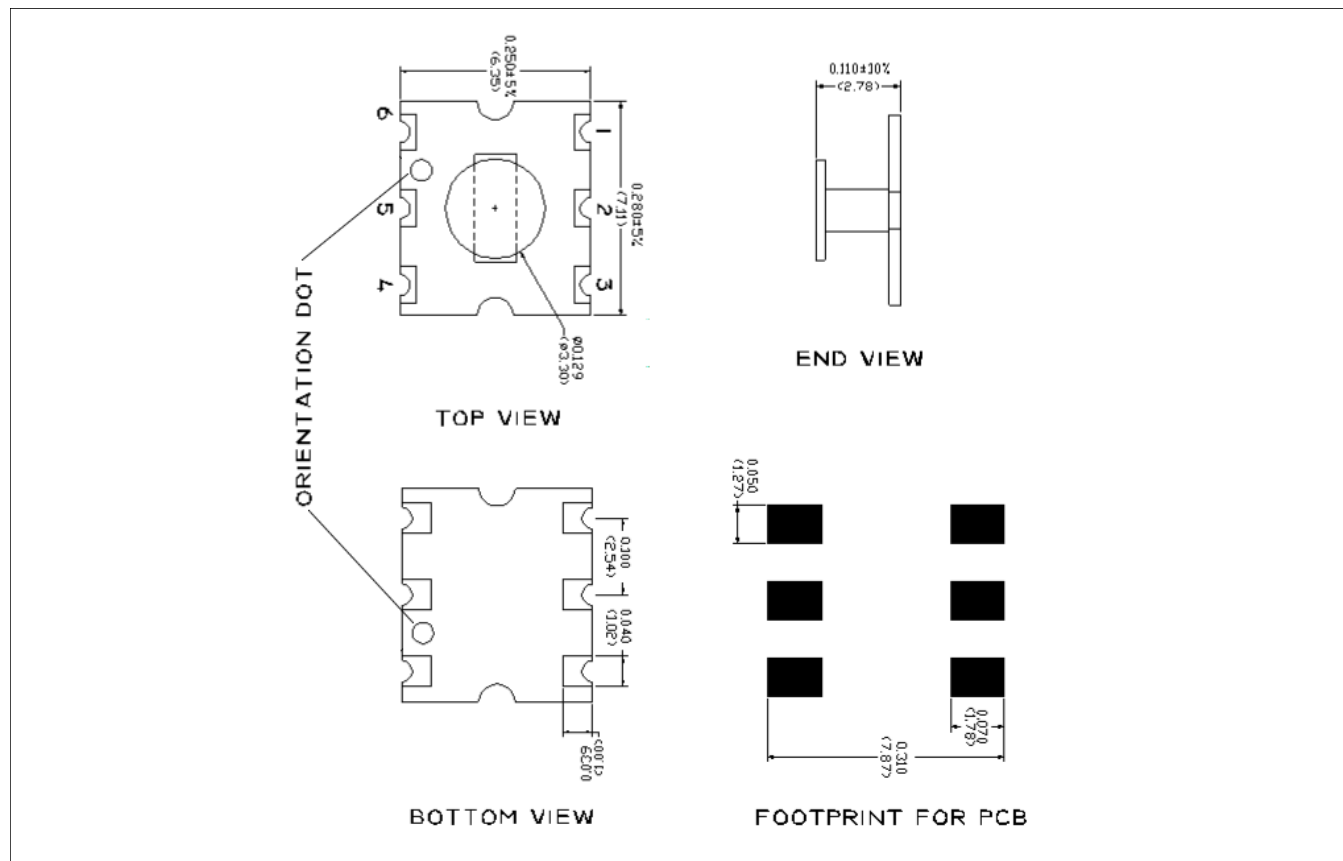
Directivity



Return Loss: Coupling



Outline Drawing



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 estoppel 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.

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

MACOM:

[MACP-009011-C80370](#)