

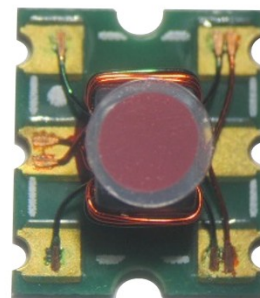
Features

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

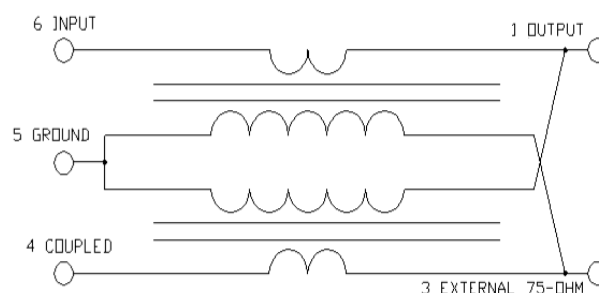
Description

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

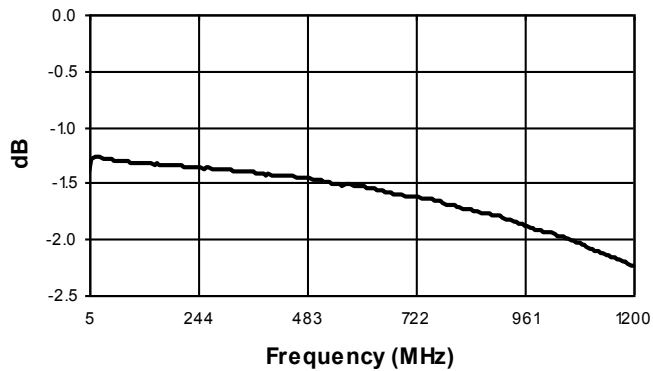
Parameter	Absolute Maximum
RF Power	250 mW
DC Current	30 mA
Operating Temperature	-20°C to + 85°C
Storage Temperature	-20°C to + 85°C

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

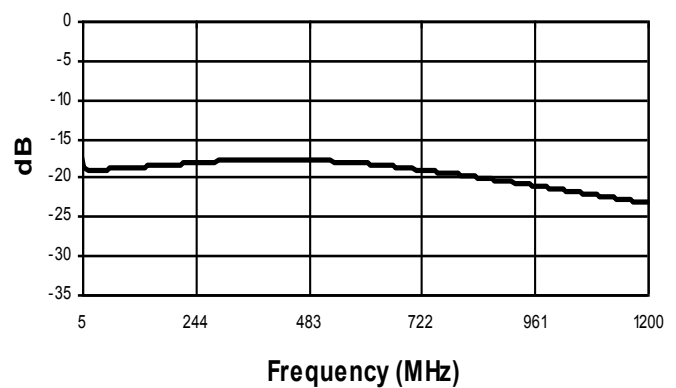
Rev. V3

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

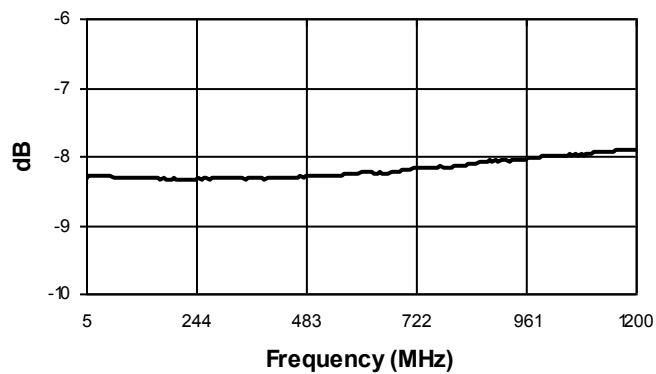
Mainline



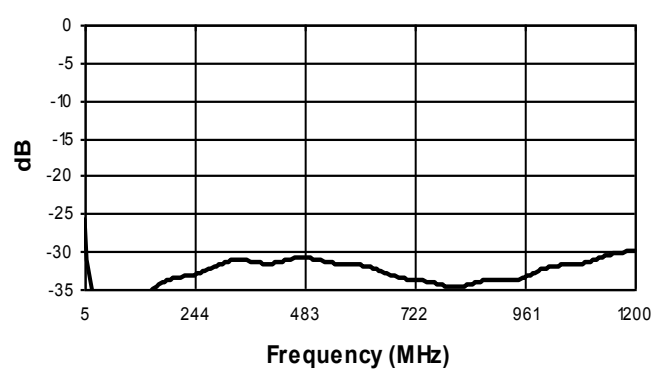
Return Loss:



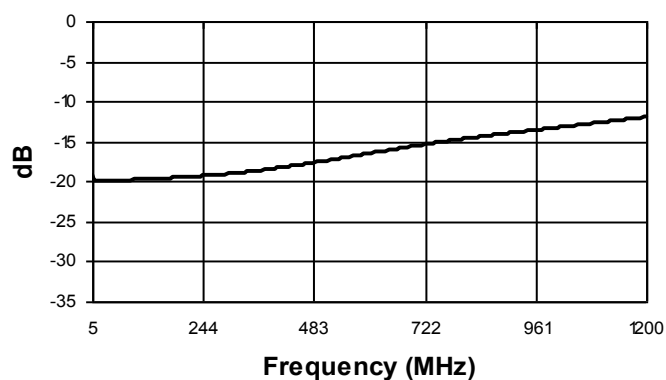
Coupling



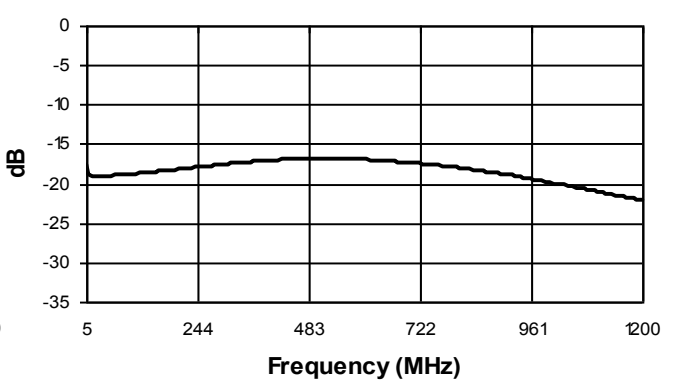
Return Loss: Output



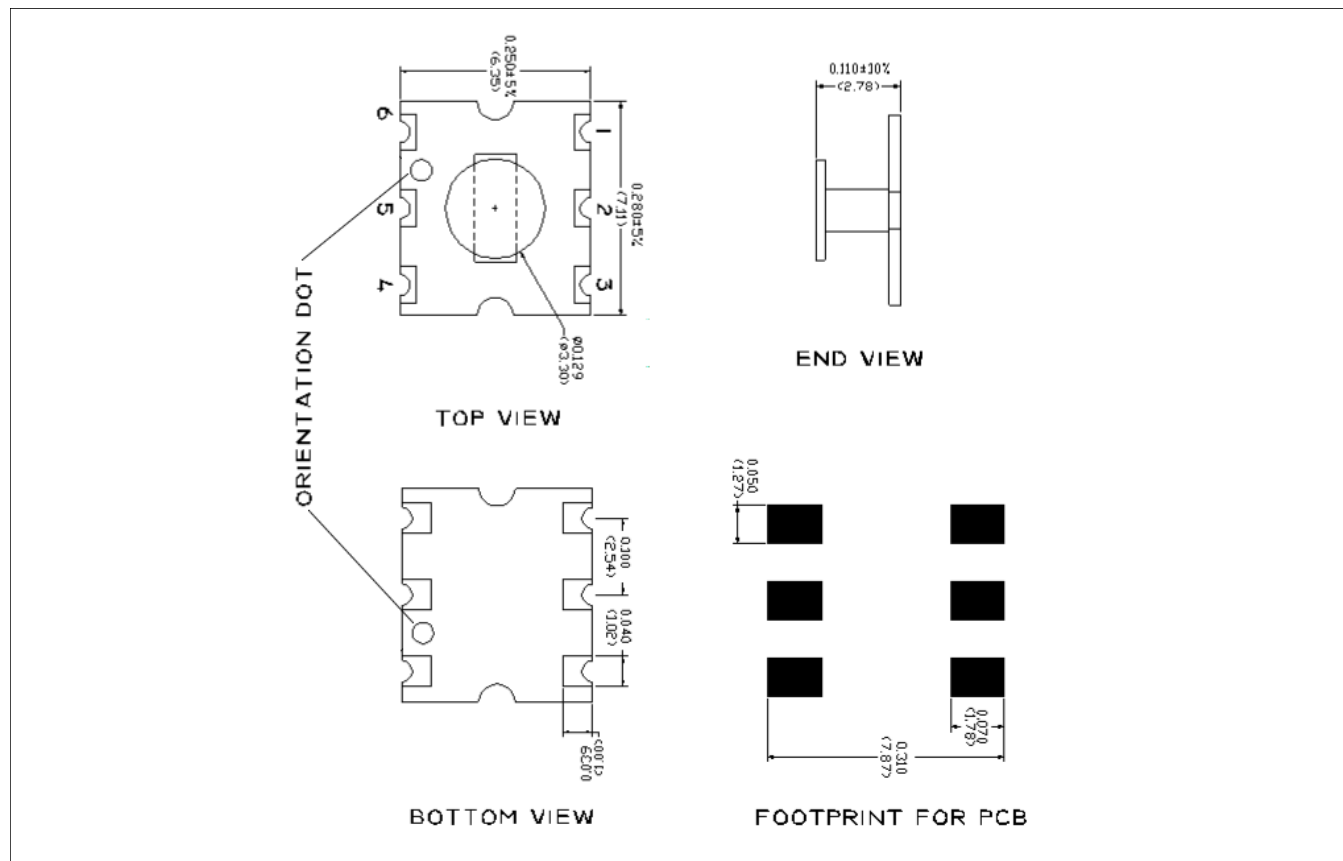
Directivity



Return Loss: Coupling



Outline Drawing



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