

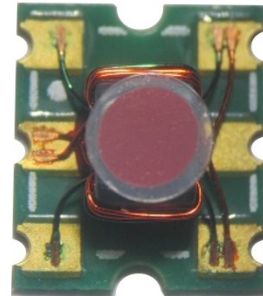
## Features

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

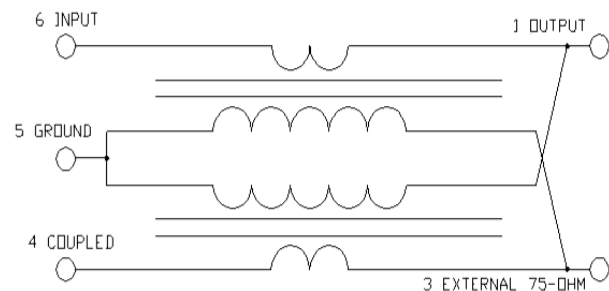
## Description

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

**Electrical Specifications: Freq. = 5 - 1200 MHz, T<sub>A</sub> = 25°C, Z<sub>0</sub> = 75 Ω**

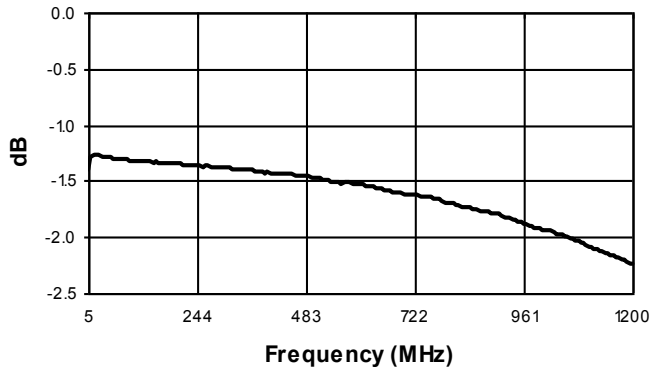
Parameter	Test Conditions	Units	Min.	Typ.	Max.
Mainline Loss	5 - 870 MHz	dB	2.0	1.50	—
	870 - 1002 MHz		2.3	1.85	
	1002 - 1200 MHz		2.6	2.10	
Coupling	5 - 1002 MHz	dB	8.5	8.3	7.5
	1002 - 1200 MHz		8.7	8.0	7.3
Coupling flatness	5 - 1200 MHz	dB	—	0.5	0.8
Directivity	5 - 870 MHz	dB	—	17.5	11
	870 - 1200 MHz		—	12.8	9
Return Loss Input	5 - 50 MHz	dB	—	18.8	17.0
	50 - 1200MHz		—	18.7	16.5
Return Loss Output	5 - 50 MHz	dB	—	31.3	23
	50 - 870 MHz		—	33.5	20
	870 - 1200 MHz		—	32.0	20
Return Loss Coupled	5 - 1200 MHz	dB	—	18.5	16

## Absolute Maximum Ratings

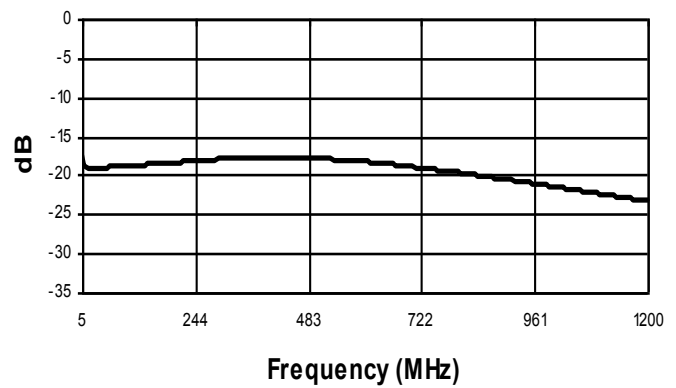
Parameter	Absolute Maximum
RF Power	250 mW
DC Current	30 mA
Operating Temperature	-20°C to + 85°C
Storage Temperature	-20°C to + 85°C

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

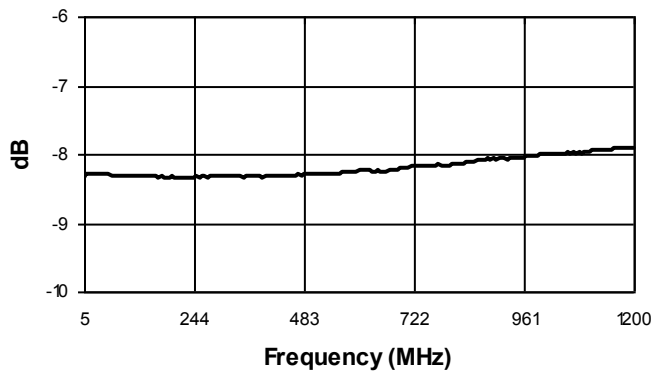
**Mainline**



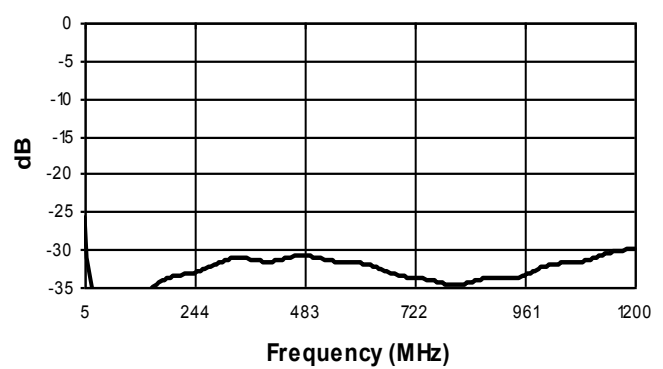
**Return Loss:**



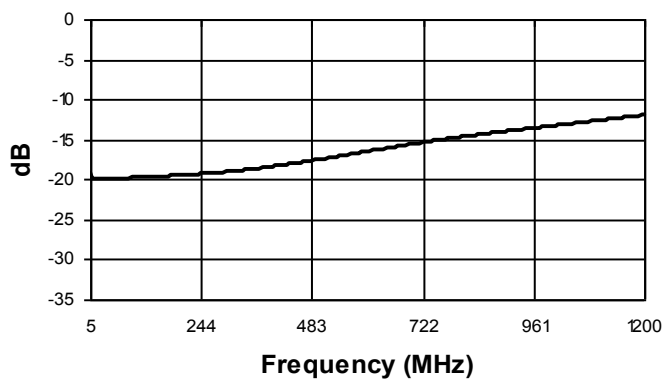
**Coupling**



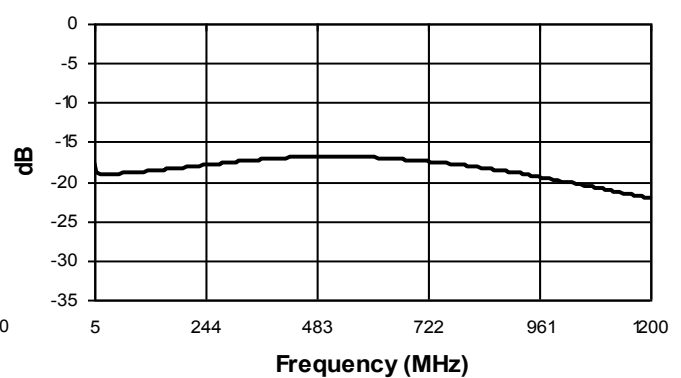
**Return Loss: Output**



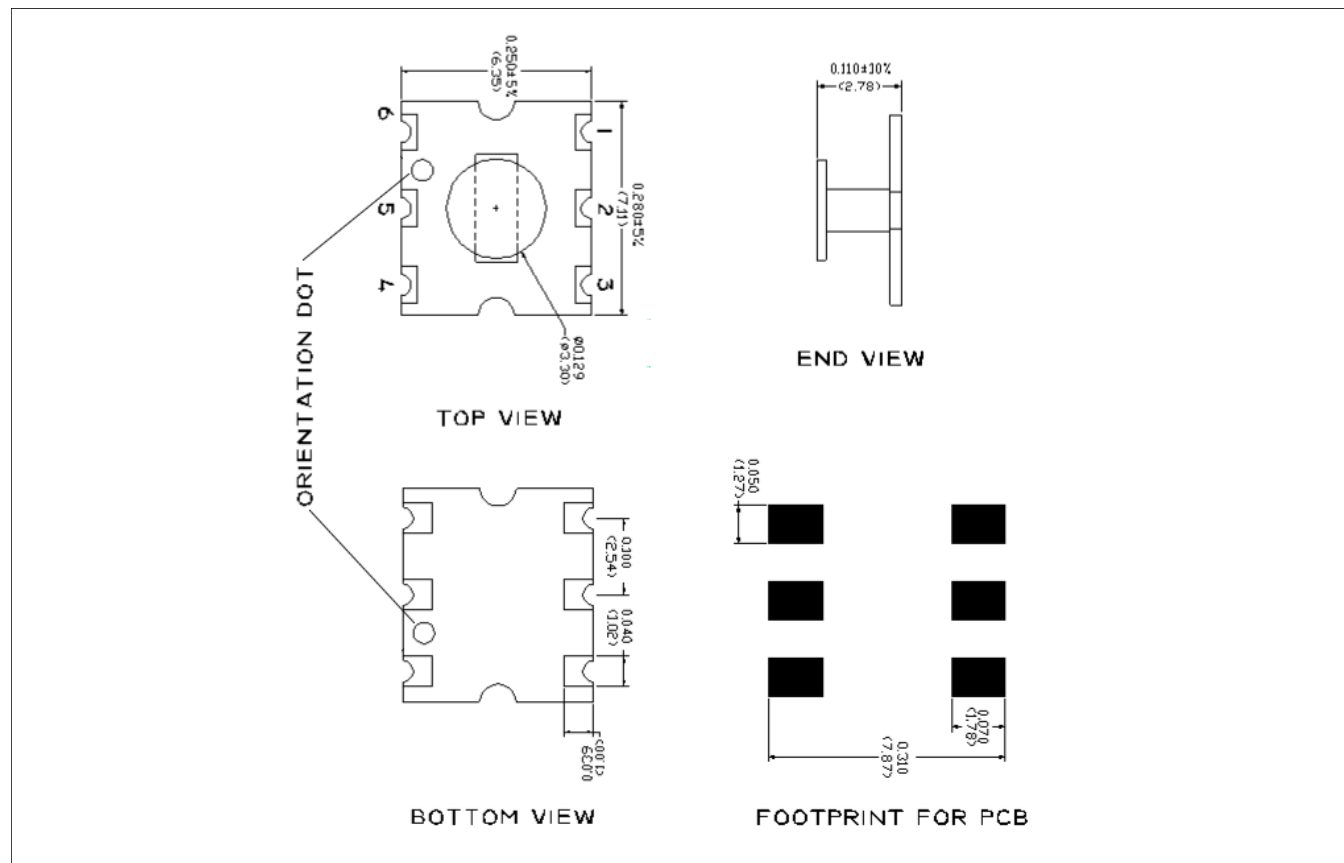
**Directivity**



**Return Loss: Coupling**



## Outline Drawing



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