

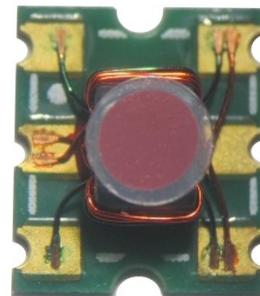
Features

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

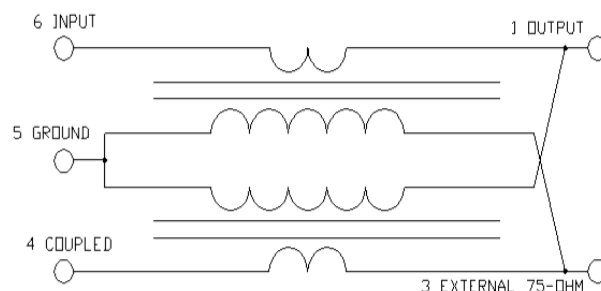
Description

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_A = 25°C, Z₀ = 75 Ω

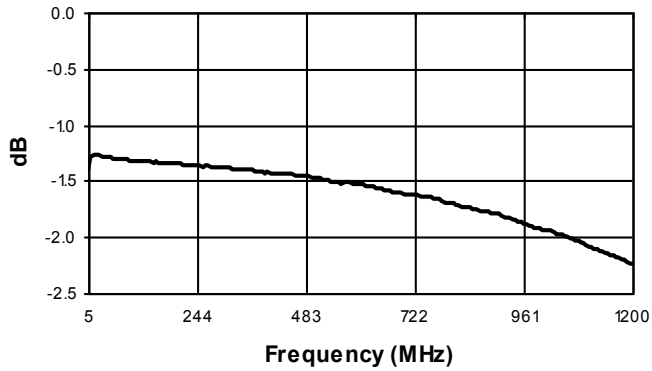
Parameter	Test Conditions	Units	Min.	Typ.	Max.
Mainline Loss	5 - 870 MHz	dB	2.0	1.50	—
	870 - 1002 MHz		2.3	1.85	
	1002 - 1200 MHz		2.6	2.10	
Coupling	5 - 1002 MHz	dB	8.5	8.3	7.5
	1002 - 1200 MHz		8.7	8.0	7.3
Coupling flatness	5 - 1200 MHz	dB	—	0.5	0.8
Directivity	5 - 870 MHz	dB	—	17.5	11
	870 - 1200 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

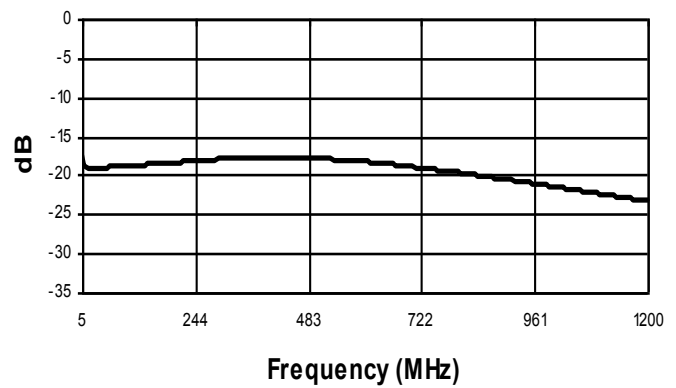
Parameter	Absolute Maximum
RF Power	250 mW
DC Current	30 mA
Operating Temperature	-20°C to + 85°C
Storage Temperature	-20°C to + 85°C

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

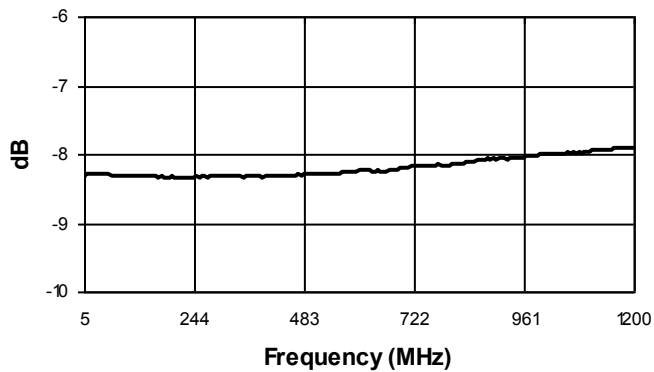
Mainline



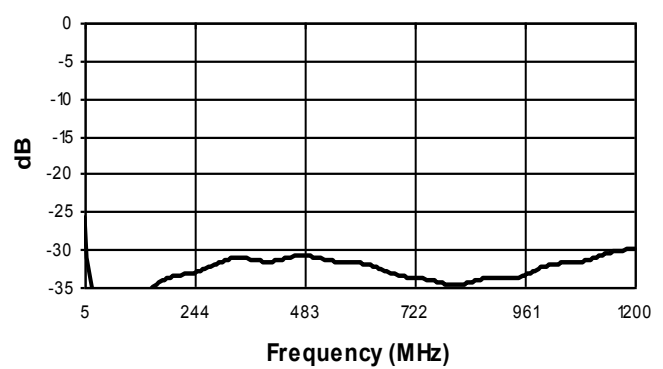
Return Loss:



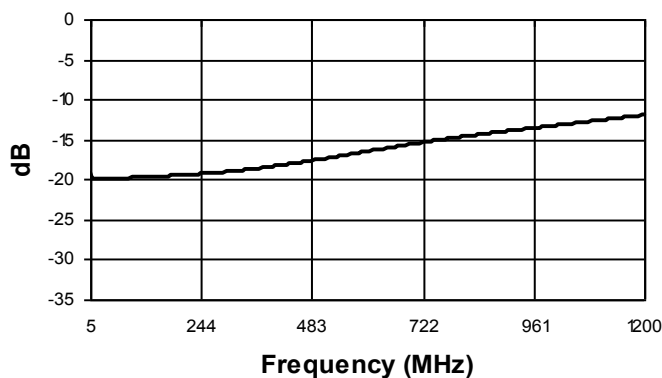
Coupling



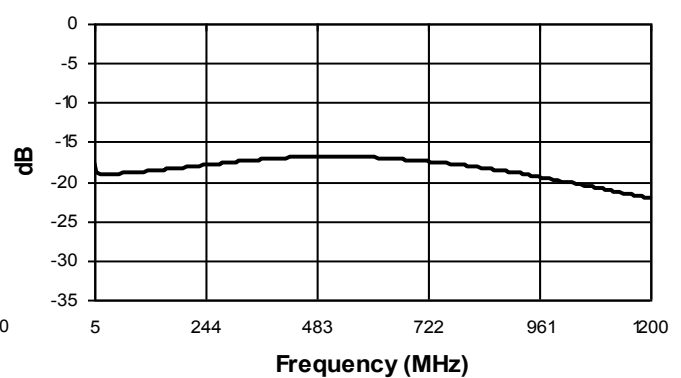
Return Loss: Output



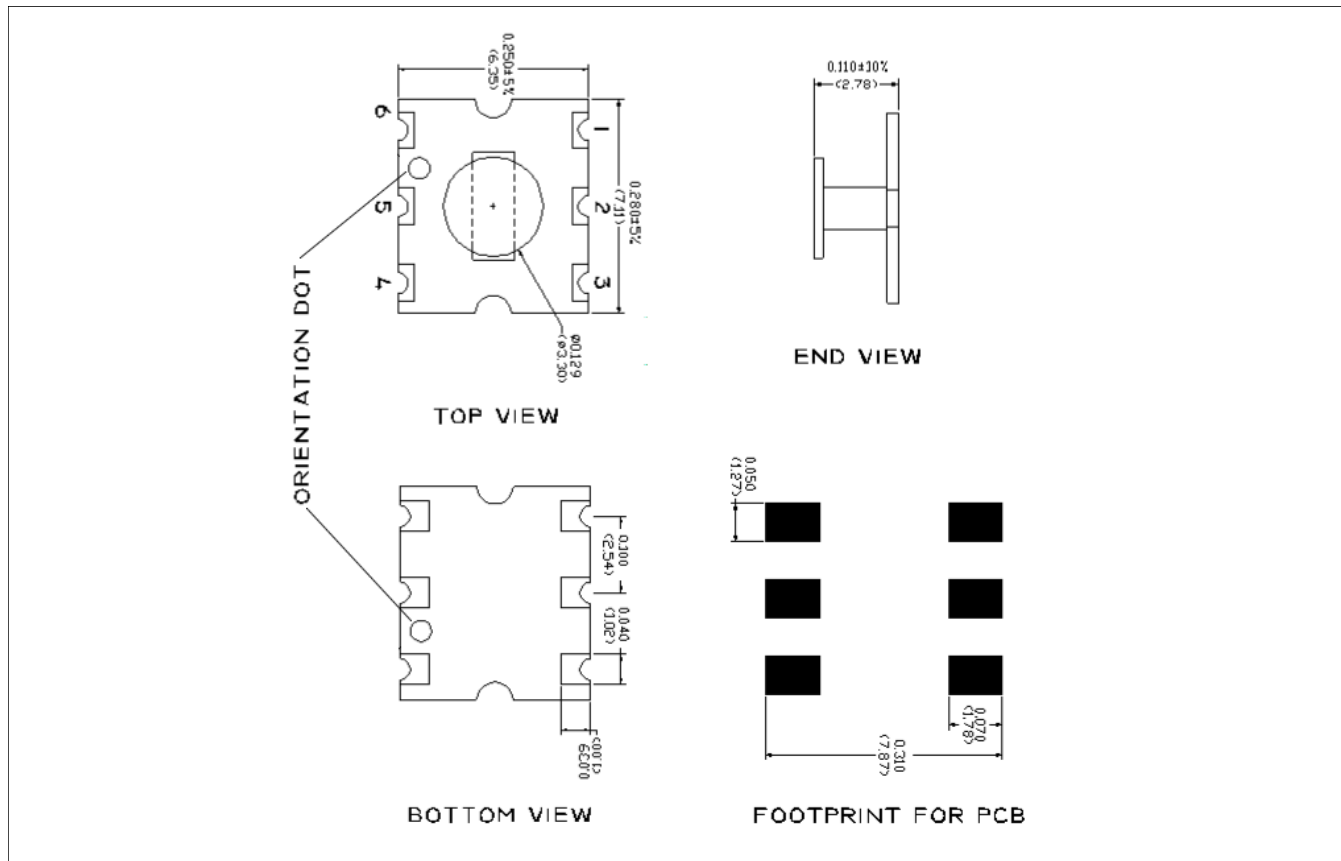
Directivity



Return Loss: Coupling



Outline Drawing



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