

**10.5 dB Coupler, 75 Ω
5 - 1000 MHz**

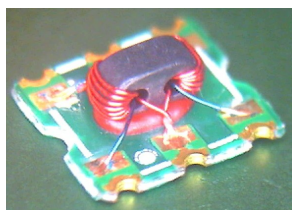
Rev. V2

Features

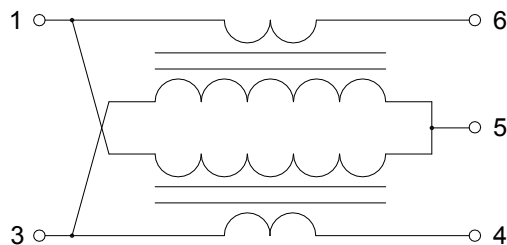
- 17 dB Coupler
- Surface Mount Package
- RoHS Compliant version of ELDC-17
- Available on Tape & Reel
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Description

The MACP-008764-CH0370 is a high performance 75 Ω coupler in a surface mount package. Ideally



Functional Schematic



Pin Configuration

Pin #	Function	Pin #	Function
1	Output	4	Coupled
2	Not Connected	5	Ground
3	External 75 Ω	6	Input

Electrical Specifications: Freq. = 5 - 1000 MHz, $T_A = 25^\circ\text{C}$, $Z_0 = 75 \Omega$, $P_{IN} = 0 \text{ dBm}$

Parameter	Freq. Test Conditions (MHz)	Units	Min.	Typ.	Max.
Coupling	5 - 1000	dB	9.5	10.5	11.5
Coupling Flatness	5 - 1000	dB	—	—	1.2
Main Line Loss	5 - 50	dB	—	1.2	1.6
	50 - 500			1.3	1.5
	500 - 1000			1.4	1.7
Directivity	5 - 50	dB	18	22	—
	50 - 500		15	20	
	500 - 1000		7	14	
Input Return Loss	5 - 1000	dB	14	17	—
Output Return Loss	5 - 1000	dB	18	23	—
Coupling Return Loss	5 - 1000	dB	14	17	—

Ordering Information

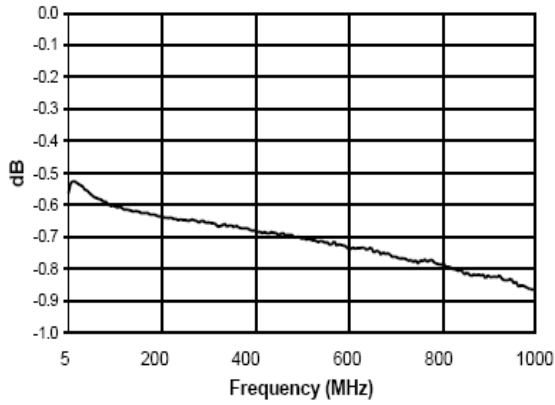
Part Number	Package
MACP-008764-CH0370	900 piece reel
MACP-008764-CH03TB	customer test board

Recommended Maximum Ratings

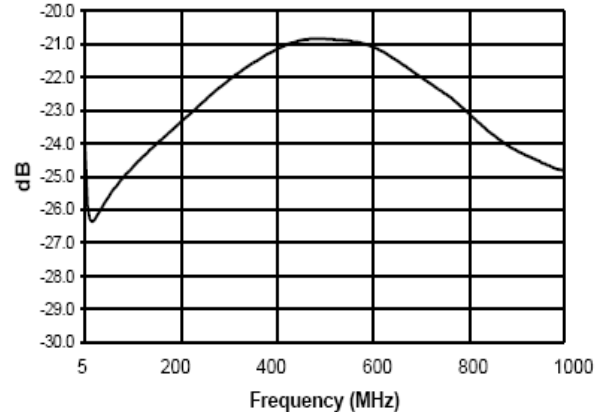
Parameter	Units
Input Power	250 mW
DC Current	30 mA
Operating & Storage Temperature	-40°C to +85°C

Typical Performance Curves

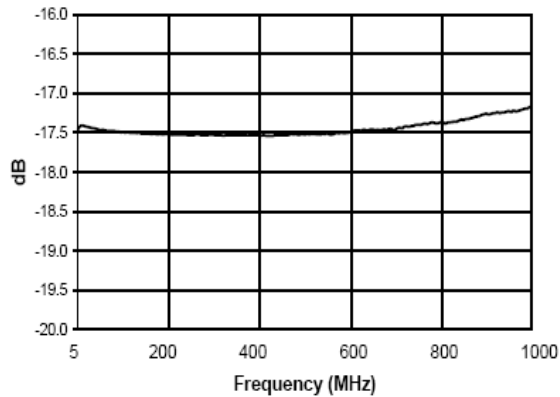
Main Line Loss



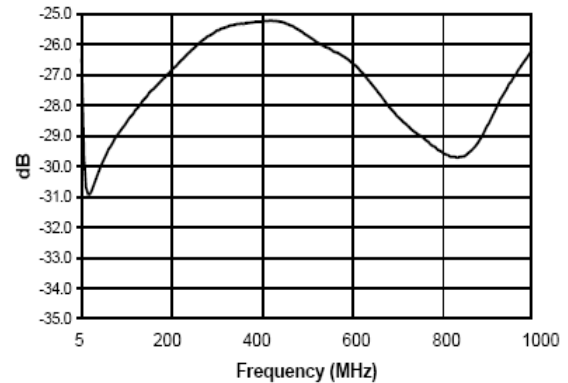
Input Return Loss



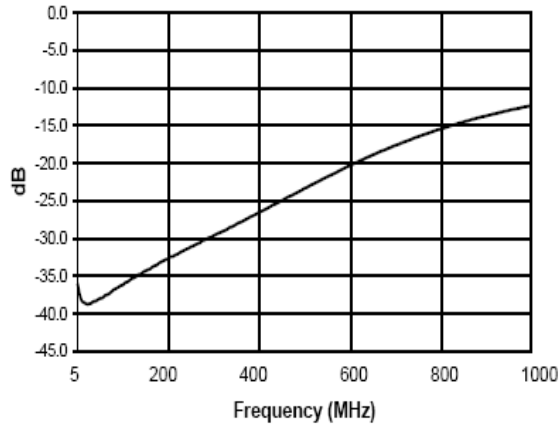
Coupling



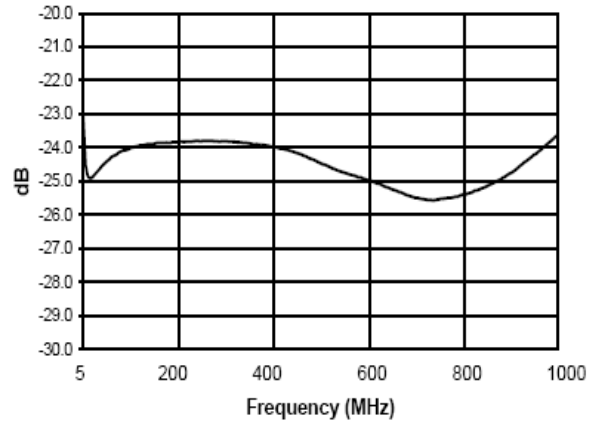
Output Return Loss



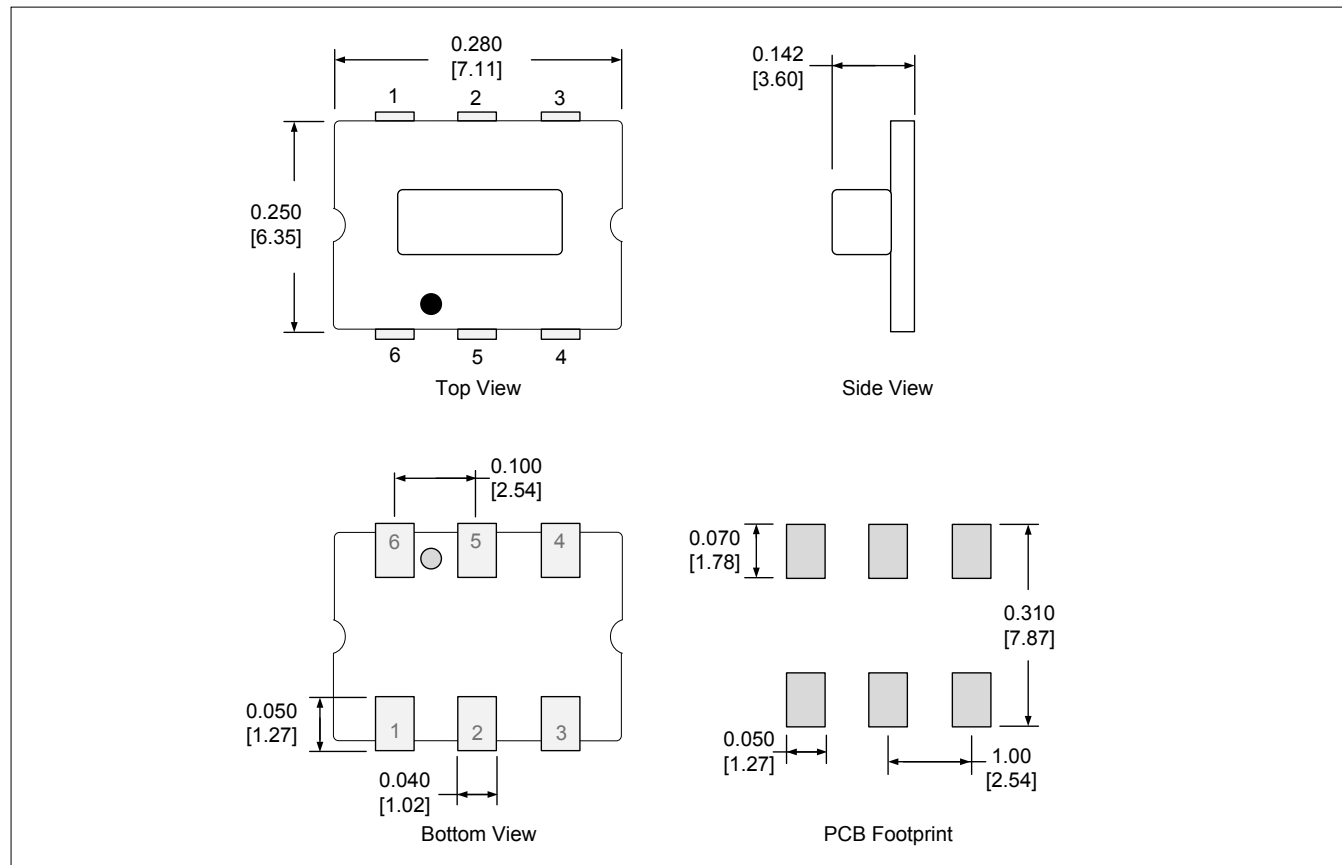
Directivity



Coupled Port Return Loss



Outline Drawing (SM-55) & PCB Footprint



Dimensions in inches [mm] Tolerance: .xx ± .02, .xxx ± .010

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