



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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Coupler 8dB
5 – 1218 MHz

Rev. V2

Features

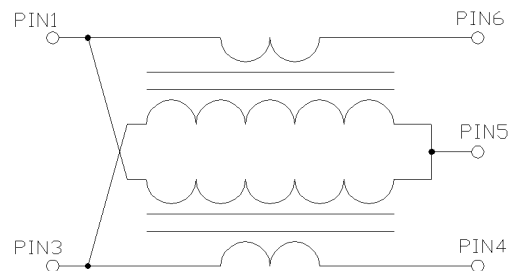
- Surface mount
- Typical Coupling 8dB
- 260° reflow compatible
- RoHS compliant and lead free
- Stable over large temperature range

Description

MACP-010250-C808A0 is a 8dB broadband Coupler in a low cost surface mount package. It offers low loss, good Isolation, good input/output matching and exceptional coupling repeatability. Ideally suited for high volume CATV and Broadband applications.



Functional Schematic



Ordering Information

Part Number	Package
MACP-010250-C808A0	Tape & Reel
MACP-010250-C808TB	Customer Test Board

Pin Configuration

Pin No.	Function
1	Output
3	Isolation (external 75 Ohm load)
4	Coupling
5	Ground
6	Input

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Electrical Specifications: $T_A = 25^\circ\text{C}$, $Z_0 = 75 \Omega$, $P_{in} = 0\text{dBm}$

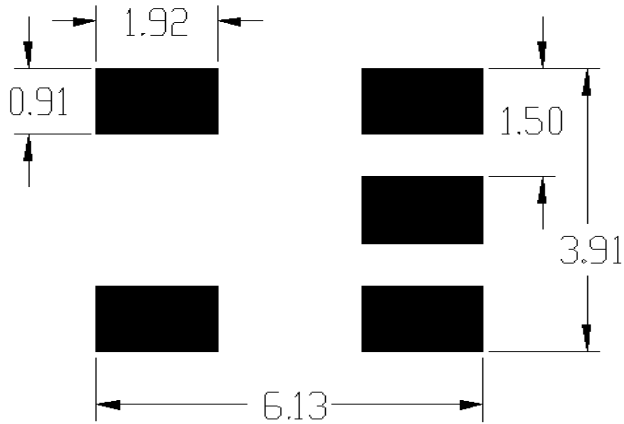
Parameter	Test Conditions	Units	Min.	Typ.	Max.
Frequency Range		MHz	5		1218
Impedance		Ω		75	
Coupling				8	
Coupling (Pin6 - Pin4)	5 - 1218 MHz	dB	-	8.6	± 0.8
Main Line Loss (Pin6 - Pin1)	5 - 500 MHz	dB	-	1.5	1.8
	500 - 1218 MHz	dB	-	1.6	2.3
Input Return Loss (Pin6)	5 - 1218 MHz	dB	14	19	-
Output Return Loss (Pin1)	5 - 1218 MHz	dB	18	37	-
Coupling Return Loss (Pin4)	5 - 1218 MHz	dB	14	18	-
Isolation Return Loss (Pin3)	5 - 1218 MHz	dB	18	32	-
Isolation (Pin6-3)	5 - 250 MHz	dB	25	27	-
	250 - 1218 MHz	dB	18	24	-

Recommended Maximum Ratings

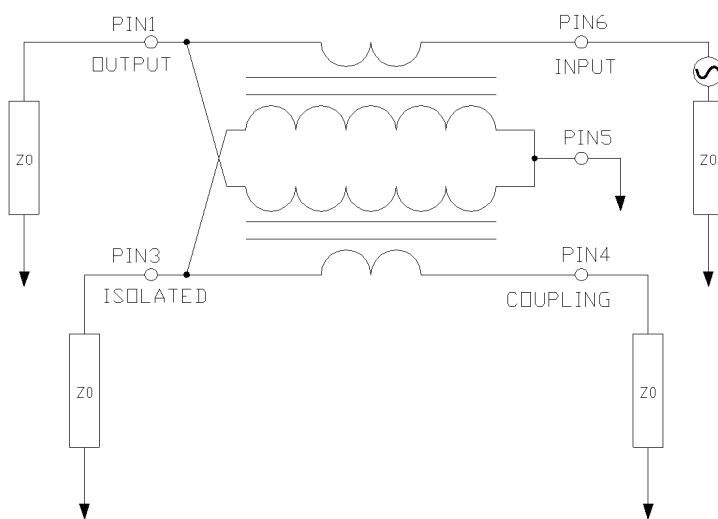
Parameter	Units	Min	Max
Input Power	mW		631
DC Current	mA		600
Operating Temperature Range	$^\circ\text{C}$	-40	105

Full temperature plots available on request

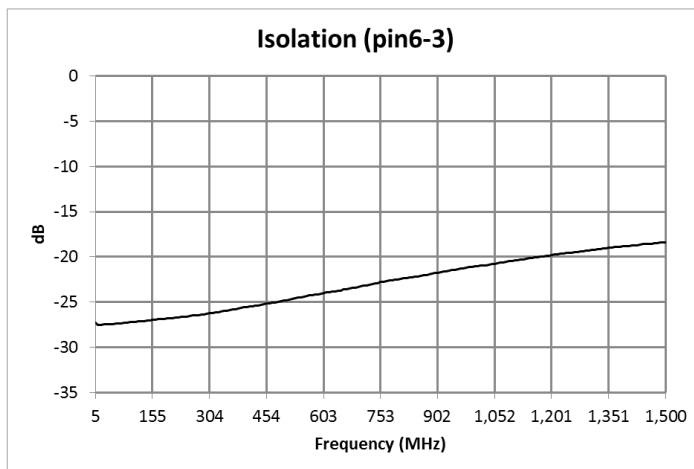
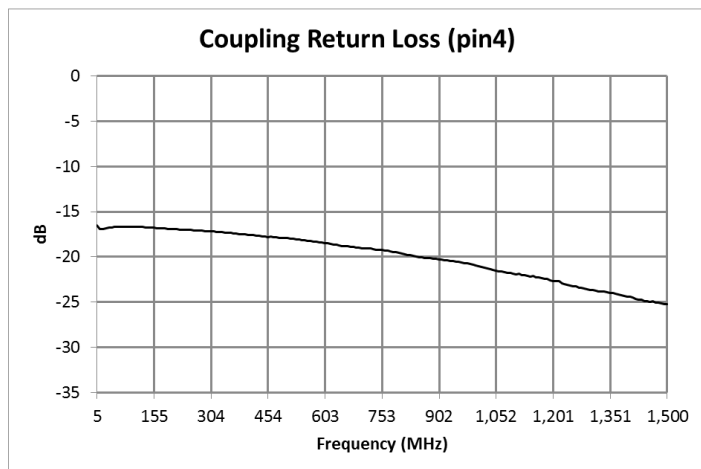
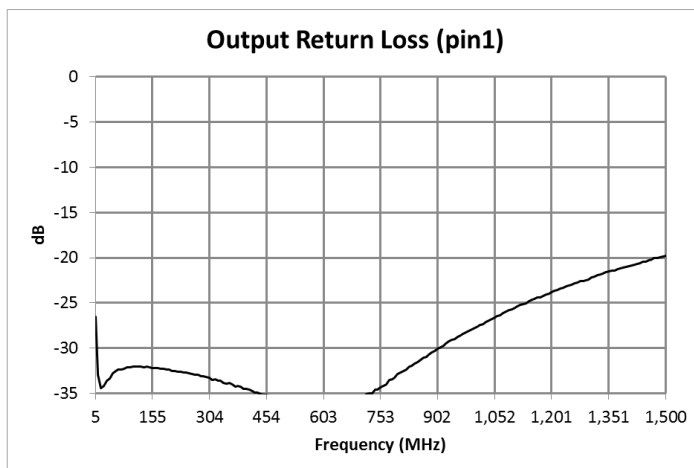
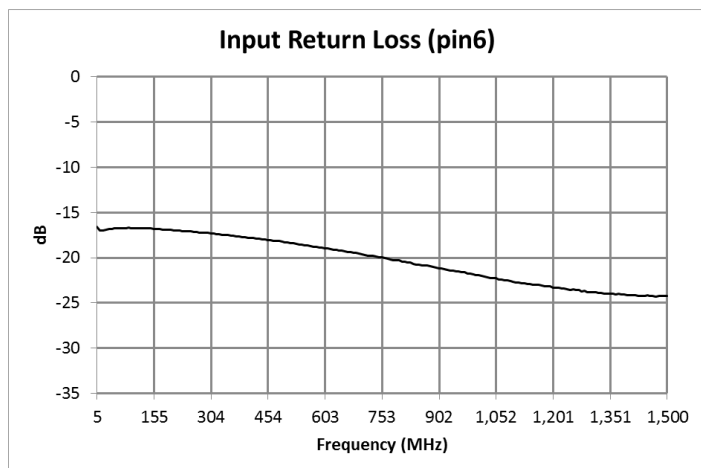
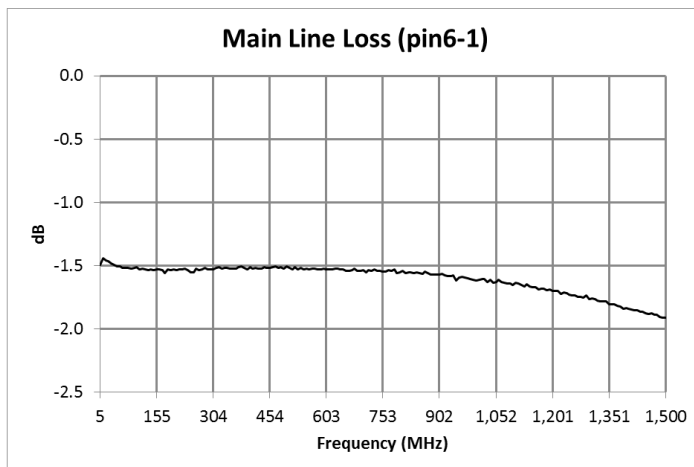
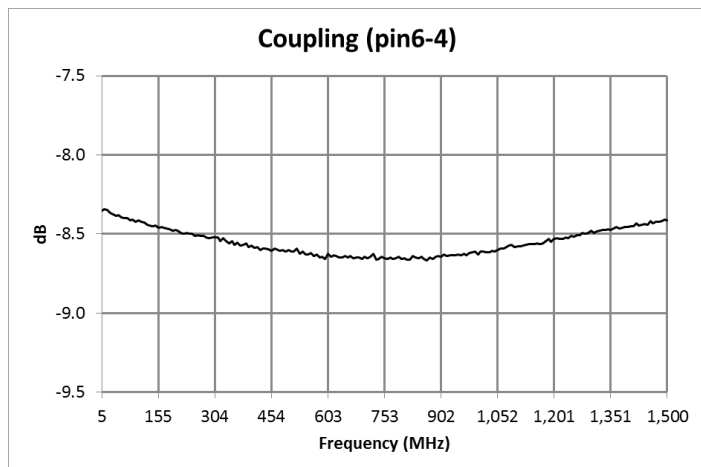
PCB Layout



Application Schematic



Typical Performance Curves

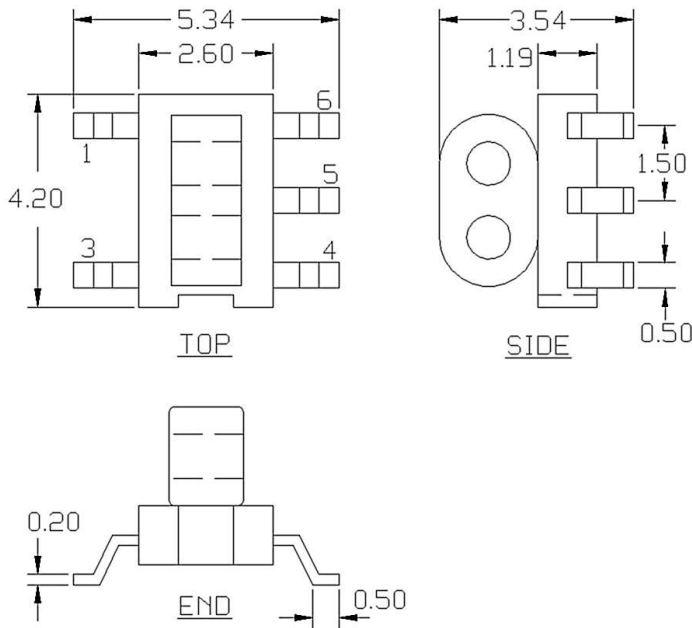


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Outline Drawing

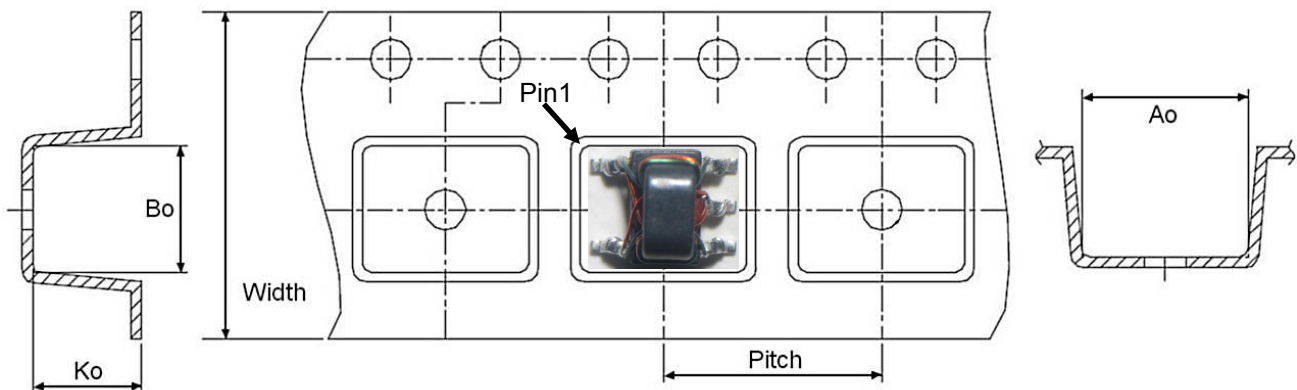


Tape & Reel Information

Parameter	Units	Value
Qty per reel	-	2000
Reel Size	mm	330
Tape Width	mm	12.00
Pitch	mm	8.00
Ao	mm	6.1
Bo	mm	4.6
Ko	mm	4.0
Orientation	-	F26
Reference Application Note ANI-019 for orientation		

1. Dimensions in mm.
2. Tolerance: ± 0.2 mm unless otherwise noted.
3. Model number and lot code are printed on the reel.
4. Finish: Lead plating (CuSn6) Lead finish SAC-305

Carrier Tape Orientation



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