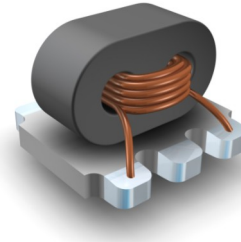
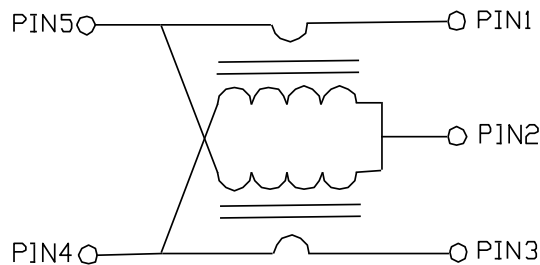


## Features

- 17dB Coupler
- Surface mount
- Available on tape and reel
- 260°C reflow compatible
- RoHS Compliant and Pb free
- Excellent temperature stability



## Schematic



## Pin Configuration

Pin No.	Function
1	Coupled
2	Ground
3	Input
4	Output
5	Isolated, External 75Ω

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

Parameter	Conditions	Units	Min	Typ	Max
Frequency Range	—	MHz	40	—	1002
Impedance	—	$\Omega$	-	75	-
Coupling (Pin3 to pin1)	40MHz 1002 MHz	dB	-	17.3	$\pm 0.25$
Main Line Loss (pin3 to pin4)	40 - 1002 MHz	dB	-	0.60	0.9
Input Return Loss (pin3)	40 - 1002 MHz	dB	18	24	-
Output Return Loss (pin4)	40 - 1002 MHz	dB	18	26	-
Coupled Return Loss (pin1)	40 - 1002 MHz	dB	18	26	-
Directivity	40 - 1002 MHz	dB	8.5	18	-

## Ordering Information

Part Number	Description
MACP-010718-CG09E0	Tape & Reel
MACP-010718-CG09TB	Customer Evaluation Board

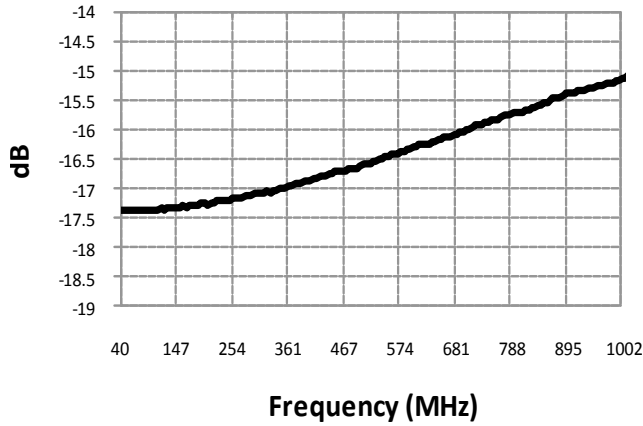
## Recommended Maximum Ratings

Parameter	Ratings
Input Power	250 mW
DC Current	200 mA
Operating Temperature	-40°C to +85°C
Storage Temperature	-55°C to +125°C

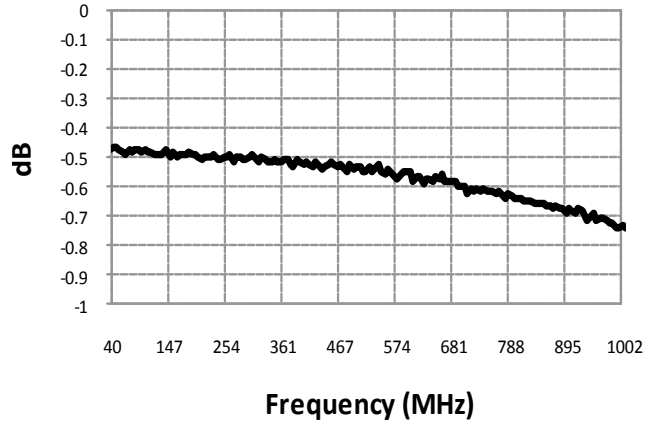
Coupler, 17dB  
40 - 1002 MHz

Rev. V3

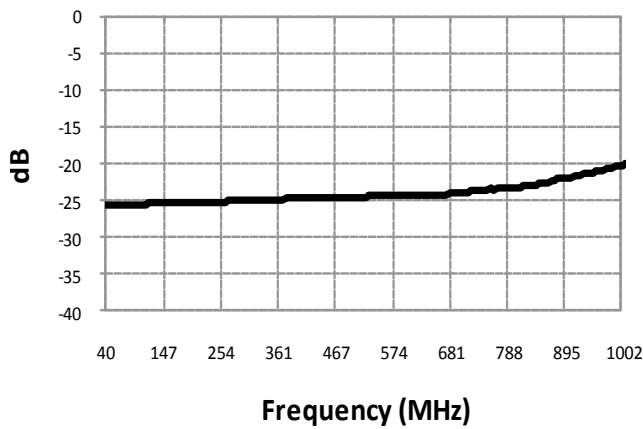
**Coupling: (pin3 to pin1)**



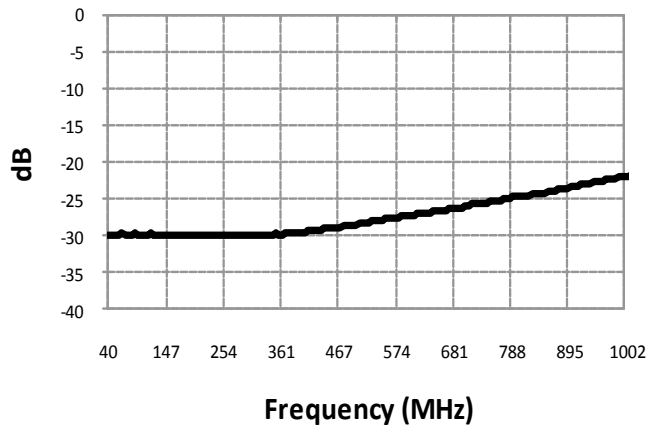
**Main Line Loss: (pin3 to pin4)**



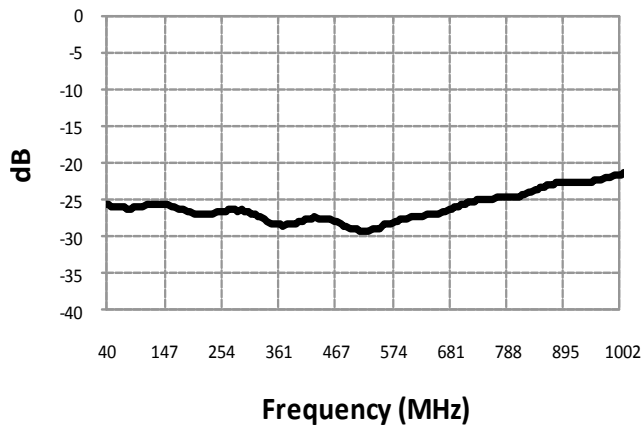
**Return Loss: Input (pin3)**



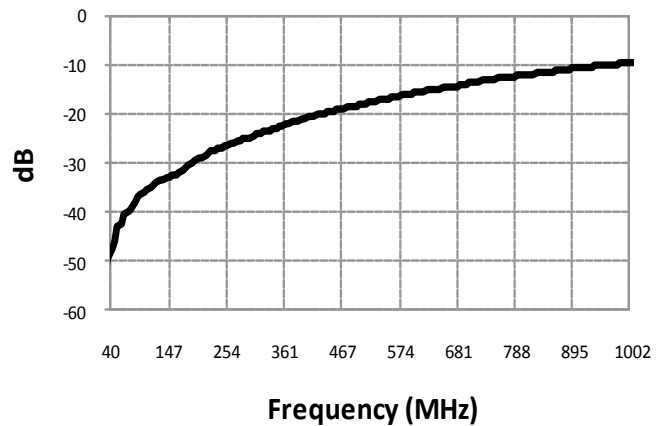
**Return Loss: Output (pin4)**



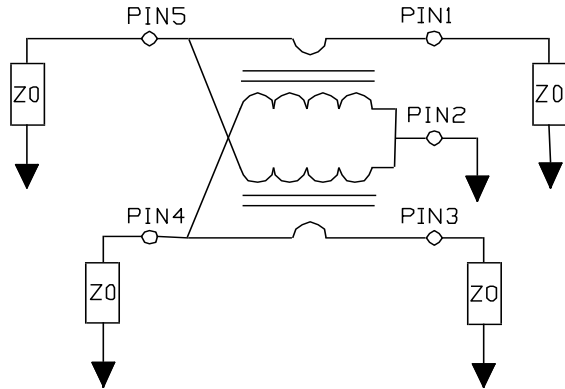
**Return Loss: Coupled (pin1)**



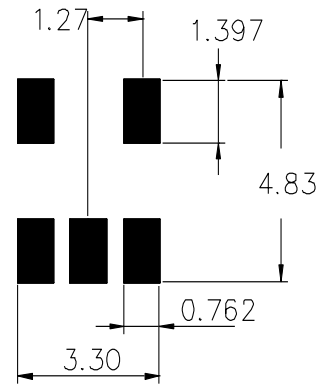
**Directivity:**



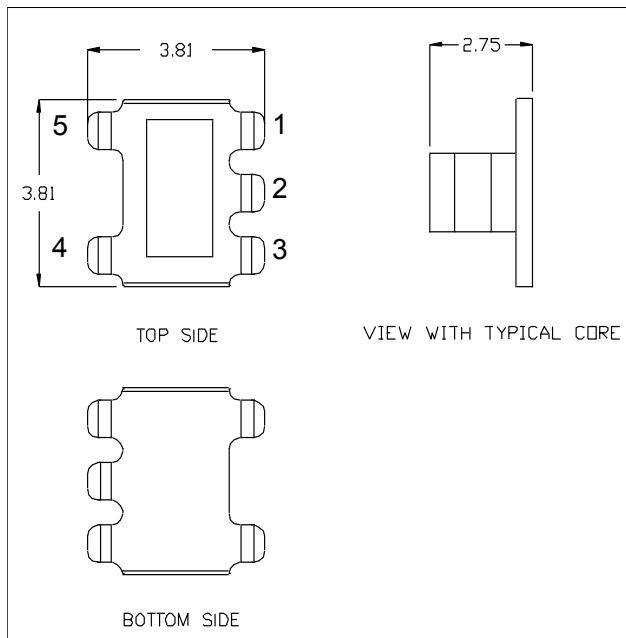
## Application Circuit



## Recommended Footprint



## Outline Drawing



1. Dimensions in mm.
2. Tolerance:  $\pm 0.2$ mm unless otherwise noted.
3. Model number and lot code are printed on the reel.
4. Finish: ENIG on both sides, 0.05 to 0.1  $\mu$ m gold over 3 to 6  $\mu$ m nickel

## 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	4.00
Bo	mm	4.30
Ko	mm	2.90
Orientation	-	F5
Reference Application Note ANI-019 for orientation		

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