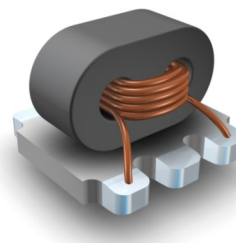


Coupler, 17dB
40 - 1002 MHz

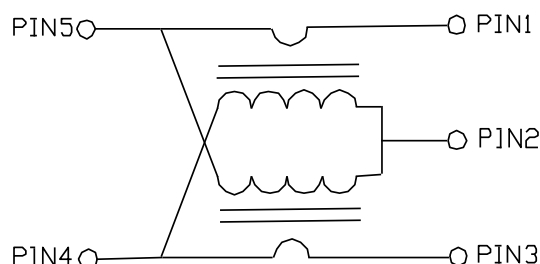
Rev. V3

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	—	Ω	-	75	-
Coupling (Pin3 to pin1)	40MHz 1002 MHz	dB dB	- -	17.3 15.2	± 0.25 ± 0.50
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

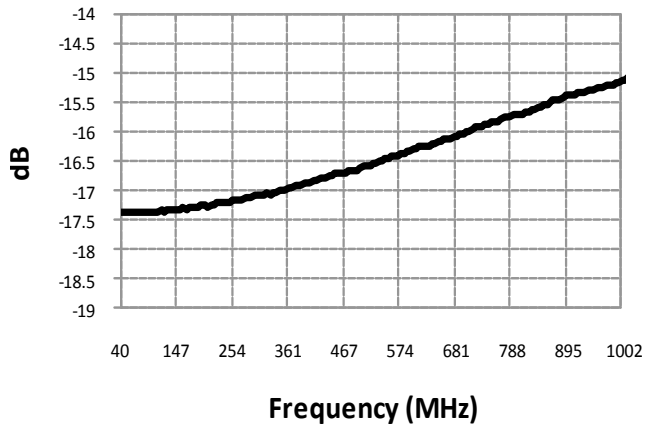
Recommended Maximum Ratings

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

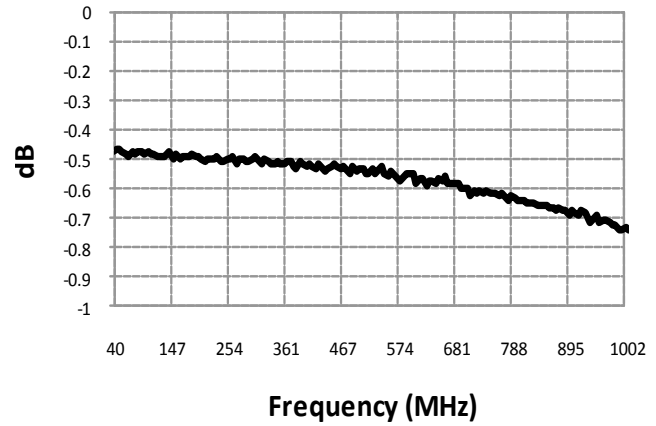
**Coupler, 17dB
40 - 1002 MHz**

Rev. V3

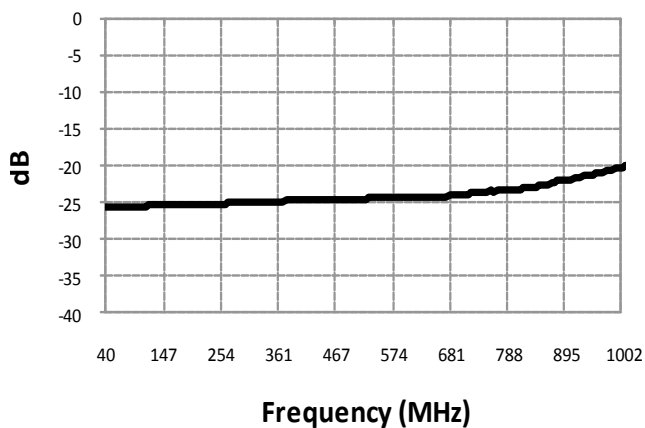
Coupling: (pin3 to pin1)



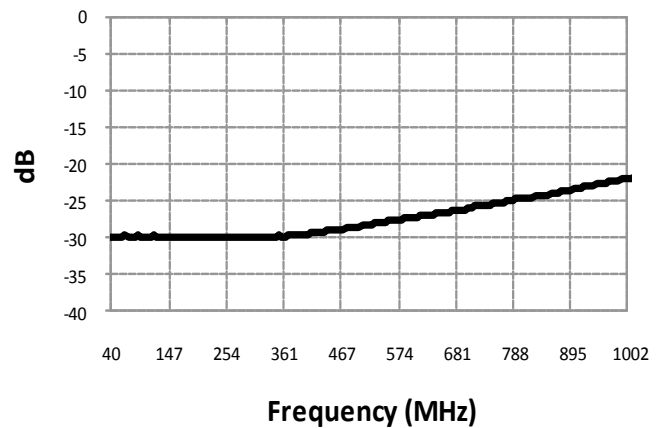
Main Line Loss: (pin3 to pin4)



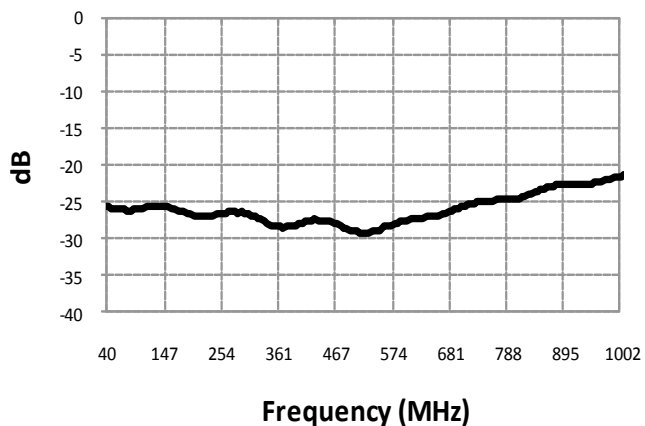
Return Loss: Input (pin3)



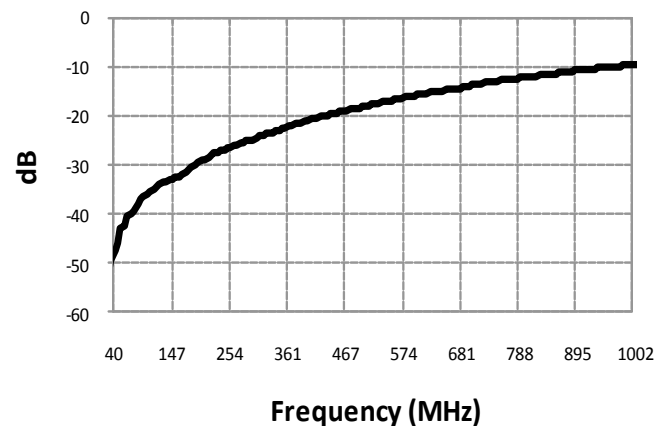
Return Loss: Output (pin4)



Return Loss: Coupled (pin1)



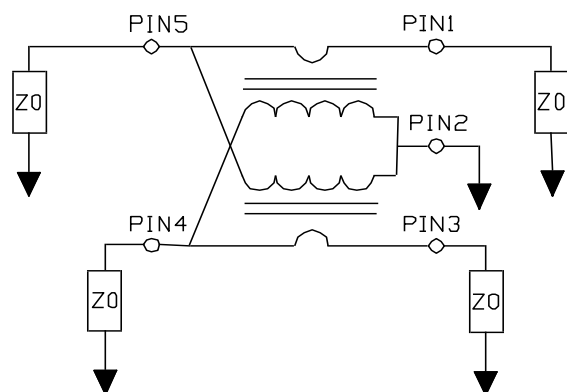
Directivity:



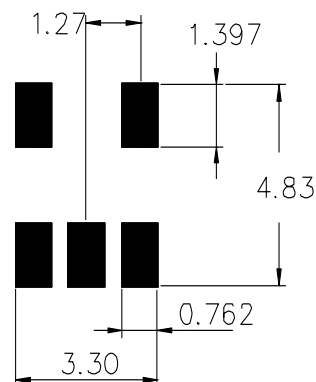
Coupler, 17dB
40 - 1002 MHz

Rev. V3

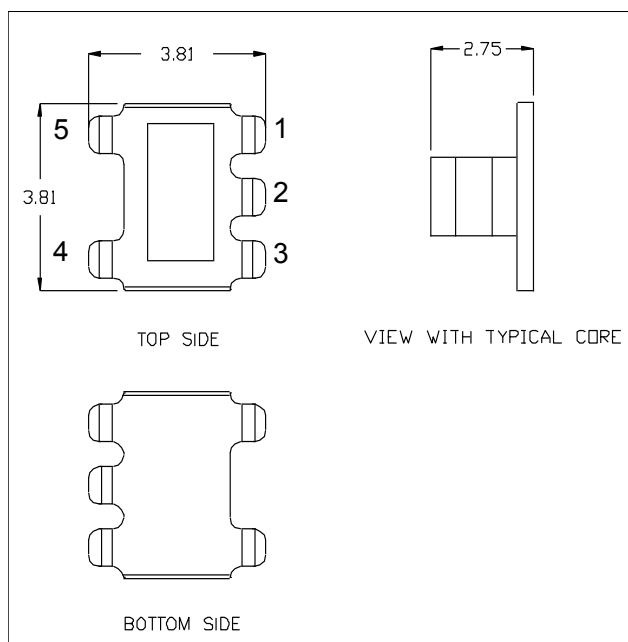
Application Circuit



Recommended Footprint



Outline Drawing



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: ENIG on both sides, 0.05 to 0.1 μ m gold over 3 to 6 μ 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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