#### E-Series Coupler 5 to 1000 MHz

#### Features

- Surface Mount
- Typical Coupling 13dB
- RoHS\* Compliant, lead free
- RoHS version of EMDC-13-1-75
- 260°C Reflow Compatible
- Available on Tape and Reel



## Electrical Specifications@ 25°C

Frequency Range 5 - 1000 MHz	Units	Nominal	Typical	Minimum	Maximum
Mainline Loss					
5 - 50 MHz	dB	—	1.5	_	2.2
50 - 500 MHz	dB	_	1.3	—	2.0
500 - 1000 MHz	dB	—	1.3	—	2.0
Coupling					
5 - 1000 MHz	dB	13 ± 1.1	—	—	—
Coupling Flatness	dB	_			0.9
Directivity					
5 - 50 MHz	dB	_	25	20	_
50 - 500 MHz	dB	—	20	15	—
500 - 1000 MHz	dB	—	13	7	—
Return Loss, all Ports 5 - 1000 MHz	dB	_	14	8	_

## **Pin Configuration**

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

<sup>1</sup> 

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# Schematic



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  Europe Tel: +353.21.244.6400
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### E-Series Coupler 5 to 1000 MHz

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Typical Performance Curves:  $T_A = 25^{\circ}C$ , 0dBm,  $Z_0 = 75\Omega$ ,  $P_{in} = 0$ dBm

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## **Outline Drawing**



1. Dimensions in mm.

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- 2. Tolerance: ±0.2mm unless otherwise noted.
- 3. Model number and lot code are printed on the reel.
- 4. Termination plating is Au.

### **Recommended Footprint**



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## **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	
Во	mm	4.00	
Ко	mm	2.90	
Orientation	-	F5	
Reference Application Note ANI-019 for orientation			

## **Ordering Information**

Part Number	Description	
MACP-009736-CD0160	2000 piece reel	
MACP-009736-CD01TB	Customer Test Board	

## **Recommended Maximum Ratings**

Parameter	Value	
RF power	250mW	
DC current	30mA	
Operating Temperature	-40°C to +85°C	
Storage Temperature	-40°C to +85°C	

# **ECO History**

Rev	Date	Description	Ву
V2	12 May 2010	Corrected the dimensions on case style drawing and changed to the new format	СВ

<sup>4</sup> 

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