

Rev. V1

Features

- Coupling 10dB Typical
- Surface mount
- low profile
- 260°C reflow compatible
- **Excellent Return Loss**
- Available on Tape & Reel

Description

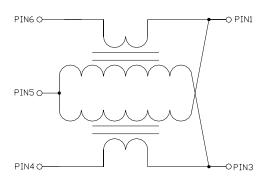
M/ACom Technology Solutions ELDC-10 is a high performance 75 Ohm Coupler, in a low cost, surface mount package. The ELDC-10 is designed for use in high volume CATV applications. Typical applications include Set top Boxes, Network Interface Units, Line Amplifiers and Head end equipment.



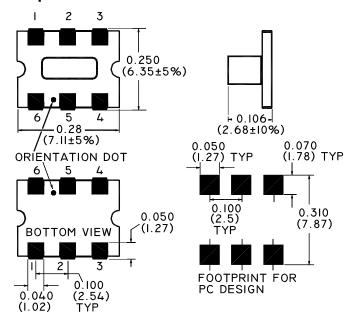
Pin Configuration

Pin no.	Function	
1	Output	
2	Not connected	
3	Isolated	
4	Coupled	
5	Ground	
6	Input	

Schematic



Component dimensions



Dimensions in inches [mm] Tolerance: $.xx \pm .02$, $.xxx \pm .010$, unless otherwise stated

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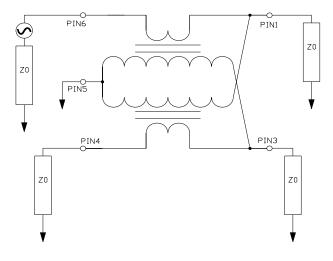
Electrical Specifications: $T_A = 25$ °C, 0dBm, $Z_0 = 75\Omega$, $P_{in} = 0$ dBm

Parameter	Frequency	Units	Min	Тур	Max
Main Line Loss	5 - 500 MHz 500 - 870 MHz	dB dB	-	0.9 1.0	1.3 1.5
Coupling	5 - 870 MHz	dB	-	10	±0.5
Coupling Flatness	-	dB	-	-	1.0
Directivity	5 - 500 MHz 500 - 870 MHz	dB dB	23 21	20 17	-
Input Return Loss	5 - 870 MHz	dB	20	18	-
Output Return Loss	5 - 870 MHz	dB	20	18	-
Coupling Return Loss	5 - 870 MHz	dB	20	18	-

Recommended Maximum Ratings

Parameter	Value
Input power	At least 250mW
DC current	At least 30mA
Operating Temperature	-40°C to +70°C
Storage Temperature	-55°C to +100°C

Application Circuit



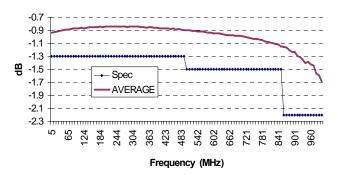
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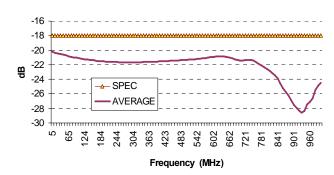
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Typical Performance Curves: $T_A = 25^{\circ}C$, 0dBm, $Z_0 = 75\Omega$, $P_{in} = 0dBm$

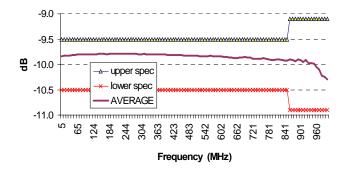
Main Line Loss:



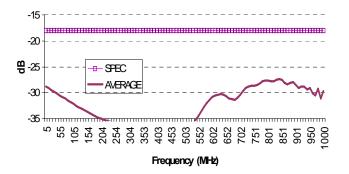
Input Return Loss



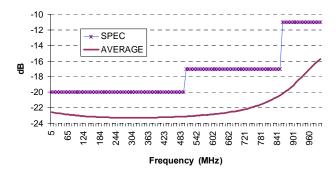
Coupling



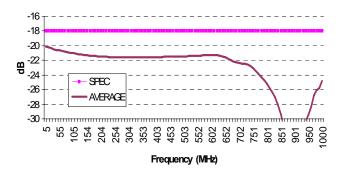
Output Return Loss



Directivity



Coupled Return Loss



3

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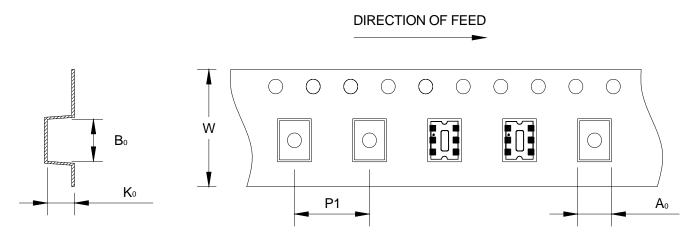
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Tape & Reel Information



Item	Dimension		
Ao	7.1mm +/- 0.1mm		
Во	8.1mm +/- 0.1mm		
Ko	3.5mm +/- 0.1mm		
W	16.0mm +/- 0.3mm		
P1	12.00mm +/- 0.1mm		

Ordering Information

Part number	Description
ELDC-10	900 piece reel

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MACOM: ELDC-10TR