

Features

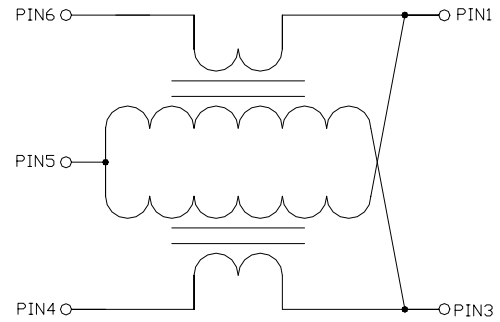
- Coupling 10dB Typical
- Surface mount
- low profile
- 260°C reflow compatible
- Excellent Return Loss
- Available on Tape & Reel

Description

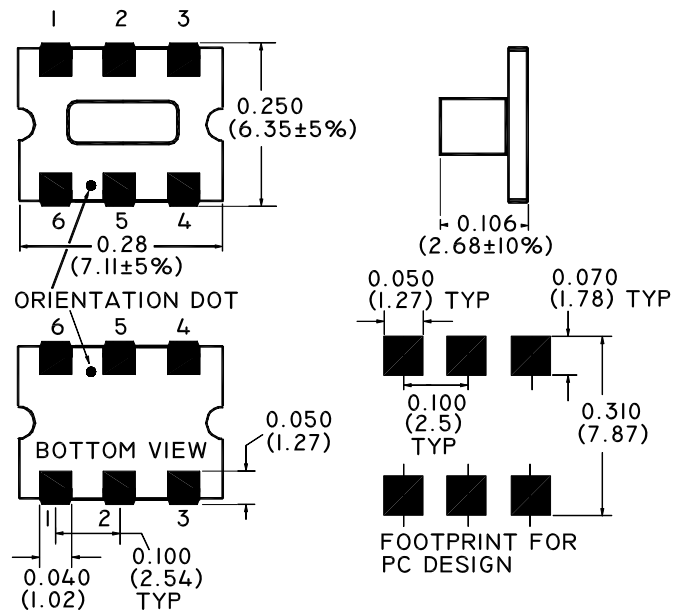
M/ACom Technology Solutions ELDC-10 is a high performance 75 Ohm Coupler, in a low cost, surface mount package. The ELDC-10 is designed for use in high volume CATV applications. Typical applications include Set top Boxes, Network Interface Units, Line Amplifiers and Head end equipment.



Schematic



Component dimensions



Pin Configuration

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

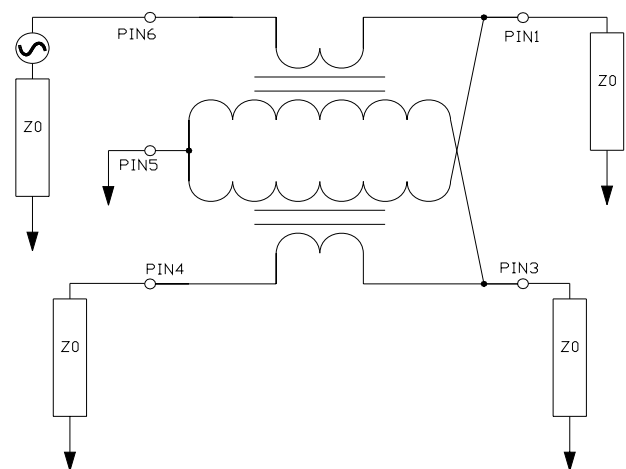
Electrical Specifications: $T_A = 25^\circ\text{C}$, 0dBm, $Z_0 = 75\Omega$, $P_{in} = 0\text{dBm}$

Parameter	Frequency	Units	Min	Typ	Max
Main Line Loss	5 - 500 MHz	dB	-	0.9	1.3
	500 - 870 MHz	dB	-	1.0	1.5
Coupling	5 - 870 MHz	dB	-	10	± 0.5
Coupling Flatness	-	dB	-	-	1.0
Directivity	5 - 500 MHz	dB	23	20	-
	500 - 870 MHz	dB	21	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

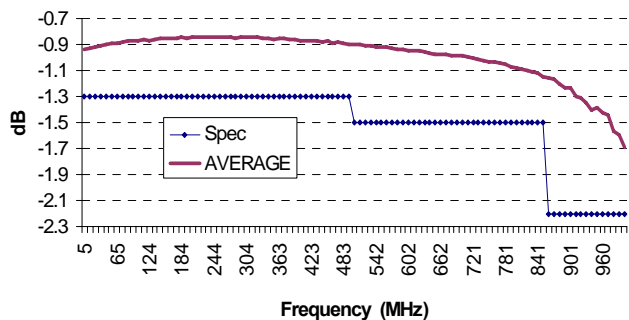
Parameter	Value
Input power	At least 250mW
DC current	At least 30mA
Operating Temperature	-40°C to $+70^\circ\text{C}$
Storage Temperature	-55°C to $+100^\circ\text{C}$

Application Circuit

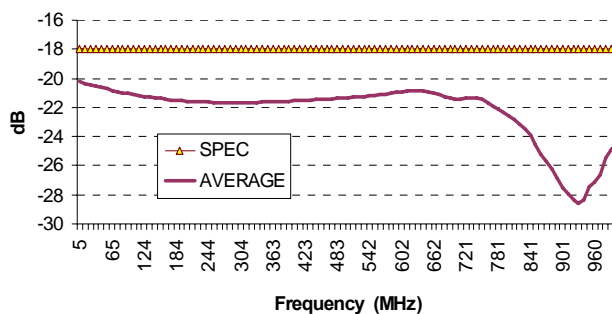


Typical Performance Curves: $T_A = 25^\circ\text{C}$, 0dBm , $Z_0 = 75\Omega$, $P_{in} = 0\text{dBm}$

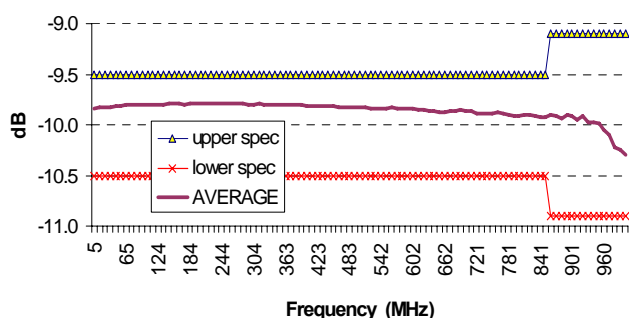
Main Line Loss:



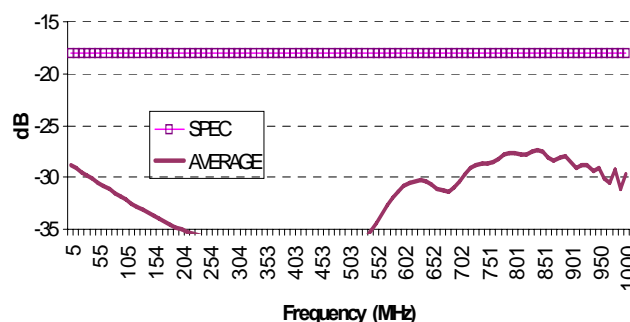
Input Return Loss



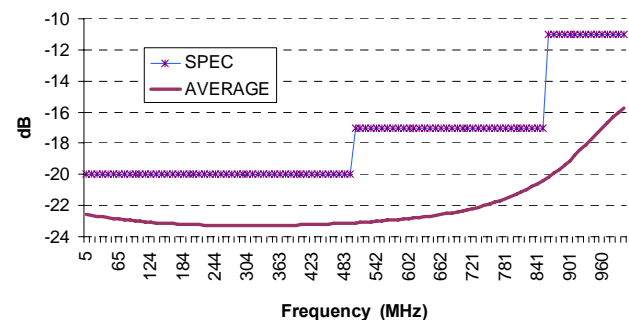
Coupling



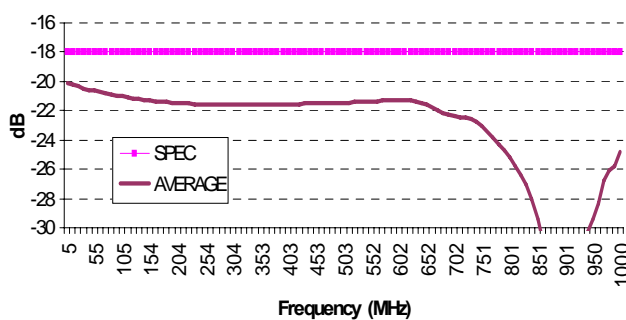
Output Return Loss



Directivity



Coupled Return Loss



ADVANCED: Data Sheets contain information regarding a product M/A-COM Technology Solutions is considering for development. Performance is based on target specifications, simulated results, and/or prototype measurements. Commitment to develop is not guaranteed.
PRELIMINARY: Data Sheets contain information regarding a product M/A-COM Technology Solutions has under development. Performance is based on engineering tests. Specifications are typical. Mechanical outline has been fixed. Engineering samples and/or test data may be available. Commitment to produce in volume is not guaranteed.

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 • **India** Tel: +91.80.43537383 • **China** Tel: +86.21.2407.1588
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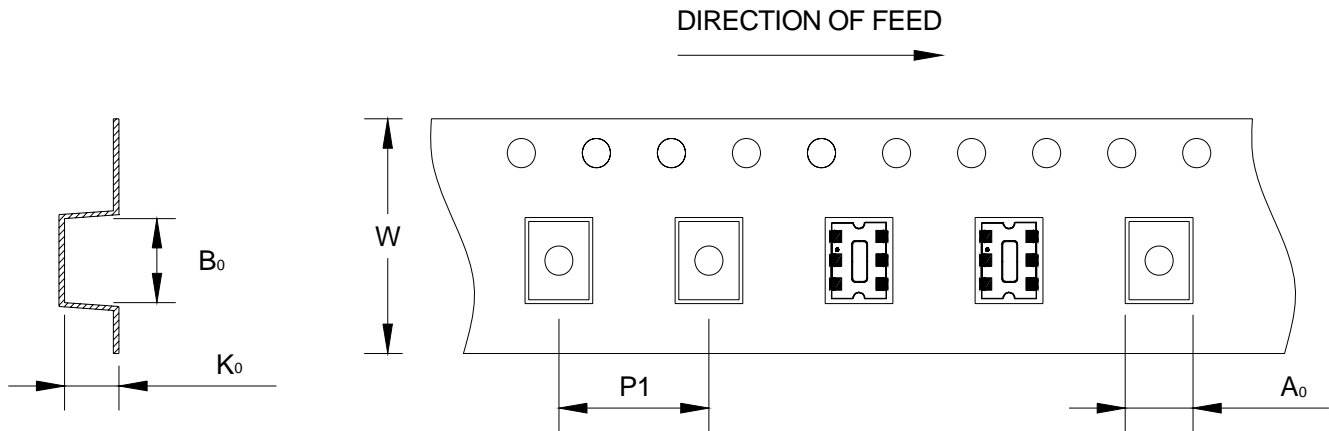
ELDC-10



Coupler, 10dB
5 to 870 MHz

Rev. V1

Tape & Reel Information



Item	Dimension
Ao	7.1mm +/- 0.1mm
Bo	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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