

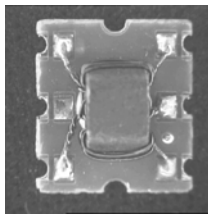
E-Series 75 Ohm Coupler

5 - 1000 MHz

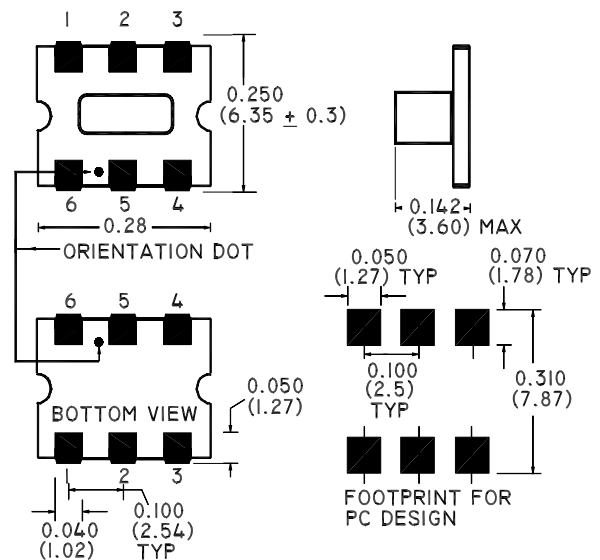


Features

- Coupling 7dB Typical
- Surface Mount
- Low Profile
- Tape and Reel Packaging available



SM-55 Package



Description

M/A-COM's ELDC-7 is a high performance 75 Ohm Coupler, in a SM-55 low cost, surface mount package. The ELDC-7 is designed for use in high volume CATV applications. Typical applications include Set-top Boxes, Network Interface Units, Broadband Amplifiers and Headend equipment.

Electrical Specifications @25°C, Z₀ = 75 Ohms

Frequency Range	5 - 1000 MHz	Units	Nominal	Typical	Minimum	Maximum
Mainline Loss	5 - 500 MHz	dB	—	2.1	—	2.4
	500 - 870 MHz	dB	—	2.2	—	2.6
	870 - 1000 MHz	dB	—	2.5	—	2.9
Coupling	5 - 870 MHz	dB	7.0	—	—	± 0.7
	870 - 1000 MHz	dB	7.0	—	—	± 1.1
Coupling Flatness	5 - 1000 MHz	dB	—	—	—	1.0
Directivity	5 - 870 MHz	dB	—	16	14	—
	870 - 1000 MHz	dB	—	15	12	—
Input Return Loss	5 - 1000 MHz	dB	—	16	14	—
Output Return Loss	5 - 500 MHz	dB	—	30	19	—
	500 - 1000 MHz	dB	—	30	25	—
Coupled Return Loss	5 - 1000 MHz	dB	—	16	14	—

S 1348 D

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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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Operating Characteristics

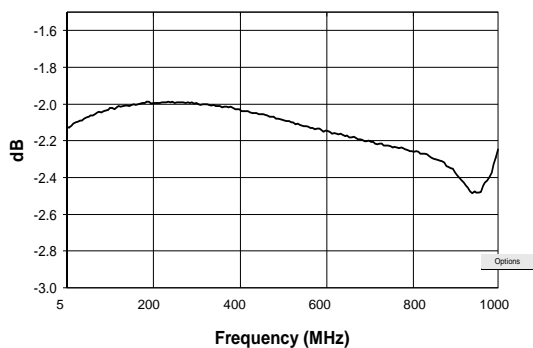
Function	Pin No.
Input	6
Output	1
Coupled	4
External 75 Ohms	3
Ground	5
Not Connected	2

Absolute Maximum Ratings

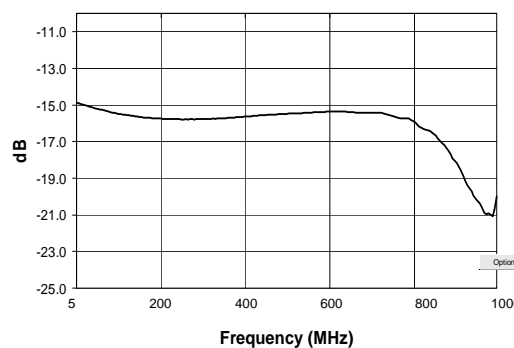
Parameter	Absolute Maximum
RF Power	250 mW
DC Current	30 mA
Pin Temperature (10 sec)	260°C
Operating/Storage Temperature	-40°C to +85°C

Typical Performance @ 25°C

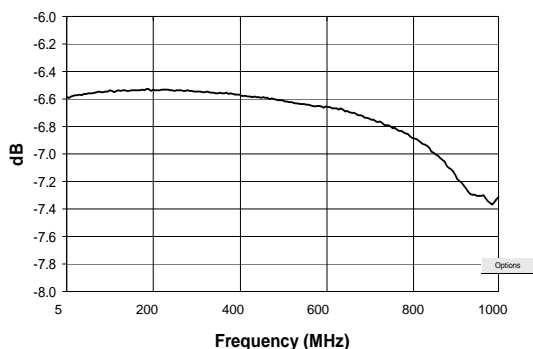
Mainline Loss



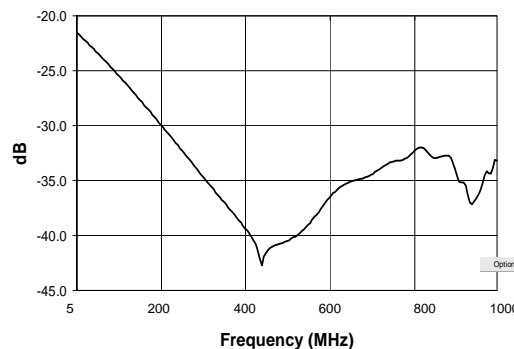
Input Return Loss



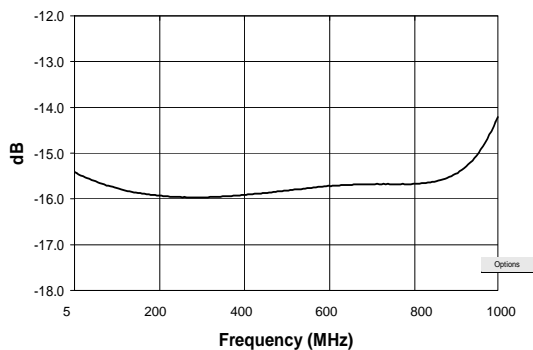
Coupling



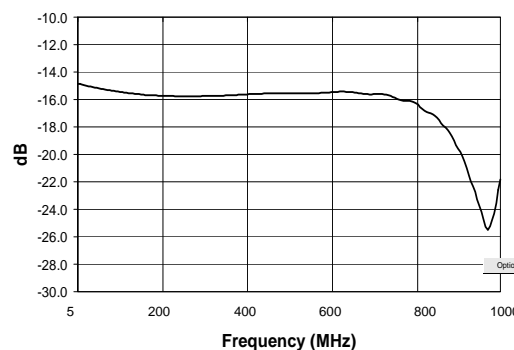
Output Return Loss



Directivity



Coupled Port Return Loss



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