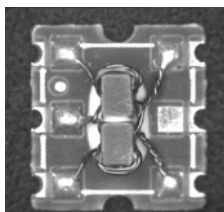


# E-Series 75 Ohm Coupler 5 - 1000 MHz



## Features

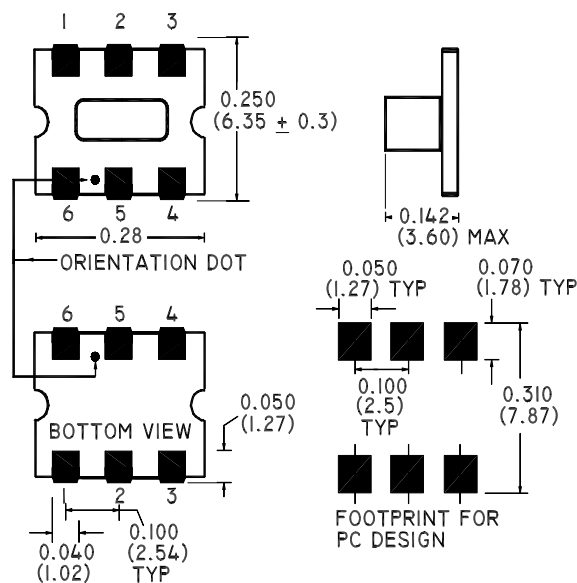
- Coupling 12dB Typical
- Surface Mount
- Low Profile
- Tape and Reel Packaging available



## Description

M/A-COM's ELDC-12 is a high performance 75 Ohm Coupler, in a SM-55 low cost, surface mount package. The ELDC-12 is designed for use in high volume CATV applications. Typical applications include Set-top Boxes, Network Interface Units, Broadband Amplifiers and Headend equipment.

## SM-55 Package



## Electrical Specifications @25°C, Z<sub>0</sub> = 75 Ohms

Frequency Range	5 - 1000 MHz	Units	Nominal	Typical	Minimum	Maximum
Mainline Loss	5 - 870 MHz	dB	—	0.8	—	1.4
	870 - 1000 MHz	dB	—	1.2	—	1.6
Coupling	5 - 870 MHz	dB	11.8	—	—	± 0.7
	870 - 1000 MHz	dB	11.8	—	—	± 0.9
Coupling Flatness		dB	—	—	—	1.1
Directivity	5 - 870 MHz	dB	—	17	9	—
	870 - 1000 MHz	dB	—	12	8	—
Input Return Loss	5 - 50 MHz	dB	—	20	17	—
	50 - 870 MHz	dB	—	21	18	—
	870 - 1000 MHz	dB	—	21	17	—
Output Return Loss	5 - 50 MHz	dB	—	22	18	—
	50 - 870 MHz	dB	—	24	22	—
	870 - 1000 MHz	dB	—	24	20	—
Coupled Return Loss	5 - 50 MHz	dB	—	19	16	—
	50 - 870 MHz	dB	—	24	19	—
	870 - 1000 MHz	dB	—	22	17	—

S 1348 D

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### Operating Characteristics

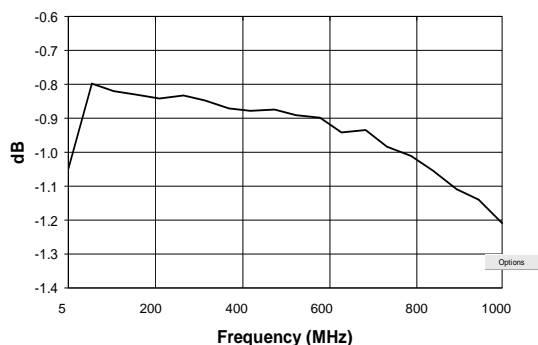
Function	Pin No.
Input	6
Output	1
Coupled	4
External 75 Ohms	3
Ground	5
Not Connected	2

### Absolute Maximum Ratings

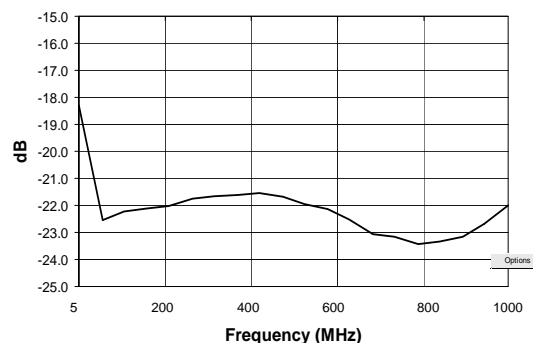
Parameter	Absolute Maximum
RF Power	250 mW
DC Current	30 mA
Pin Temperature (10 sec)	260°C
Operating/Storage Temperature	-40°C to +85°C

### Typical Performance @ 25°C

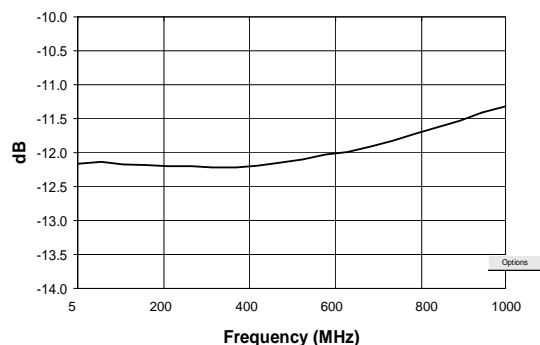
Mainline Loss



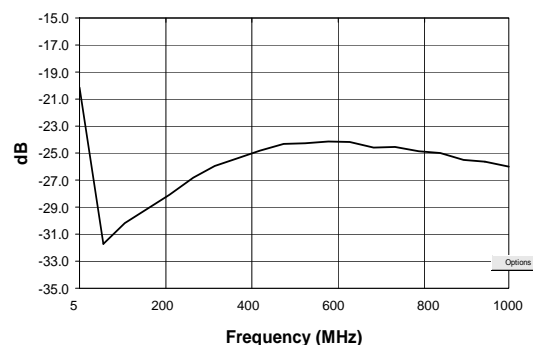
Input Return Loss



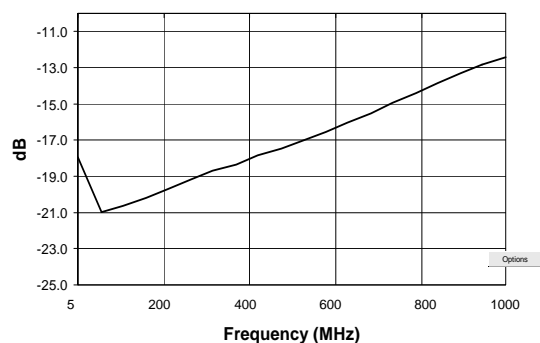
Coupling



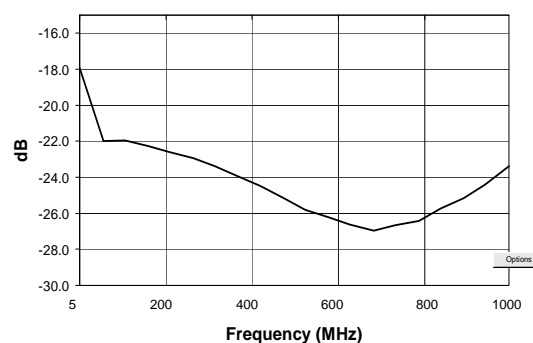
Output Return Loss



Directivity



Coupled Port Return Loss



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