



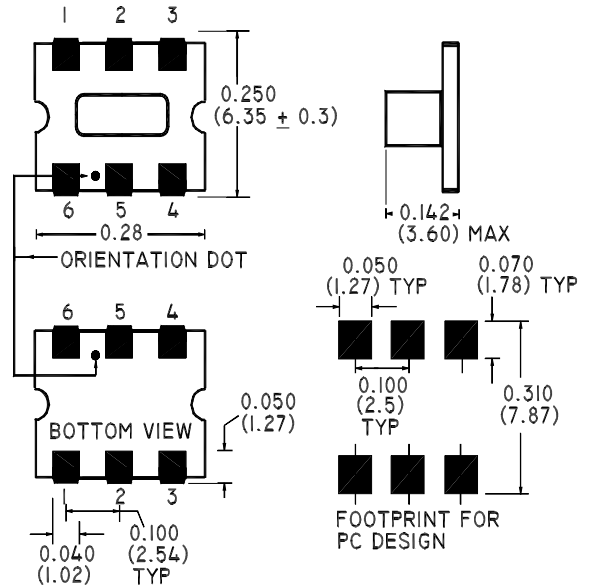
E-Series 75 Ohm Coupler 5 - 1000 MHz

Features

- Coupling 8dB Typical
- Surface Mount
- Low Profile
- Tape and Reel Packaging available



SM-55 Package



Description

M/A-COM's ELDC-8 is a high performance 75 Ohm Coupler, in a SM-55 low cost, surface mount package. The ELDC-8 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	Units	Nominal	Typical	Minimum	Maximum
Mainline Loss	5 - 870 MHz	—	1.5	—	2.3
	870 - 1000 MHz	—	2.1	—	2.6
Coupling	5 - 870 MHz	7.9	—	—	± 0.6
	870 - 1000 MHz	7.9	—	—	± 0.8
Coupling Flatness	dB	—	—	—	0.9
Directivity	5 - 870 MHz	—	17	11	—
	870 - 1000 MHz	—	13	10	—
Input Return Loss	5 - 50 MHz	—	18	17	—
	50 - 870 MHz	—	18	16	—
	870 - 1000 MHz	—	20	16	—
Output Return Loss	5 - 50 MHz	—	22	24	—
	50 - 870 MHz	—	34	20	—
	870 - 1000 MHz	—	24	18	—
Coupled Return Loss	5 - 50 MHz	—	19	16	—
	50 - 870 MHz	—	20	16	—
	870 - 1000 MHz	—	20	16	—

*Notes:

1. Core is coated with Paralyene C, 0.005" thick minimum.
2. Wire is heavy poly-nylon coated, rated to 180°C.

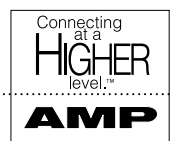
S 1349 E



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Operating Characteristics

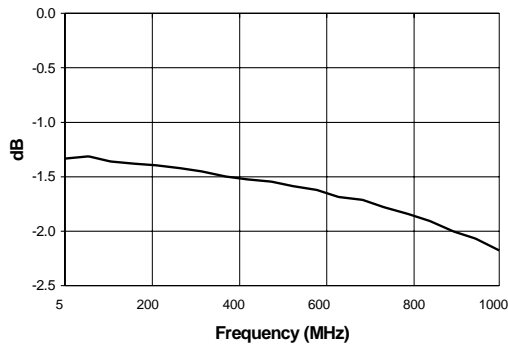
Function	Pin No.
Input	6
Output	1
Coupled	4
External 75 Ohms	3
Ground	5
Not Connected	2

Absolute Maximum Ratings

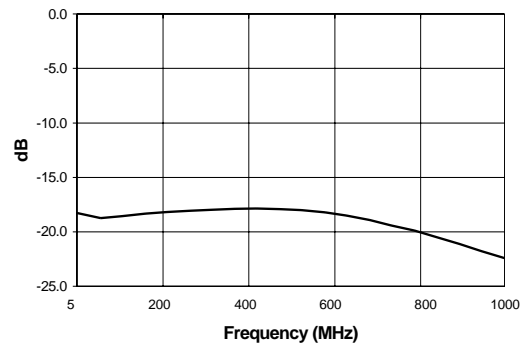
Parameter	Absolute Maximum
RF Power	250 mW
DC Current	30 mA
Pin Temperature (10 sec)	260°C
Operating/Storage Temperature	-40°C to +85°C

Typical Performance @ 25°C

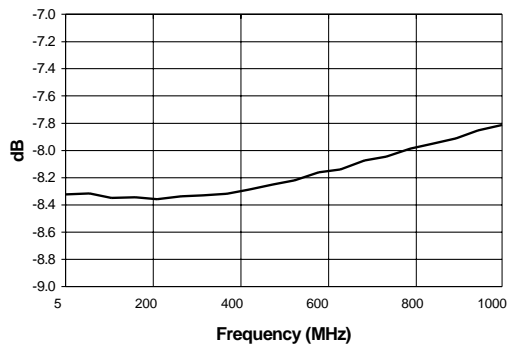
Mainline Loss



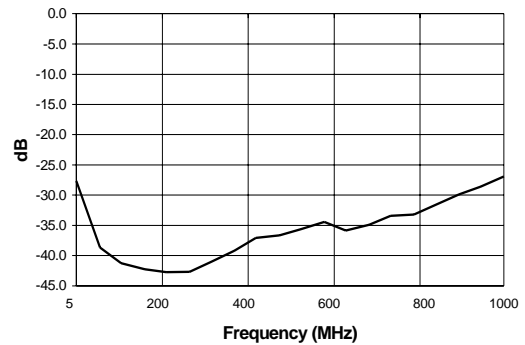
Input Return Loss



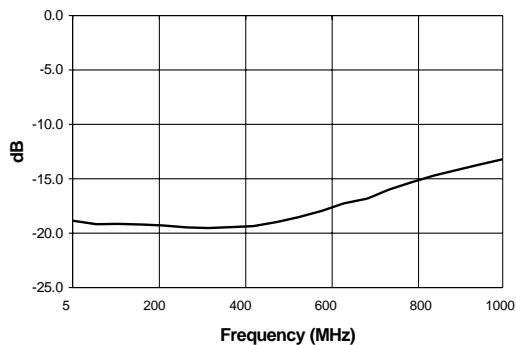
Coupling



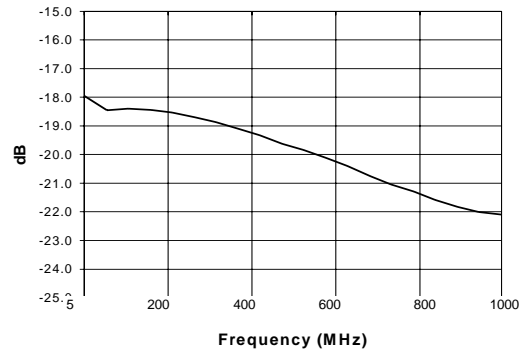
Output Return Loss



Directivity



Coupled Port Return Loss



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