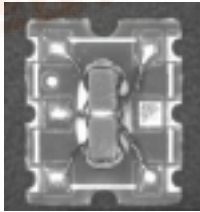




E-Series 75 Ohm Coupler 5 - 1000 MHz

Features

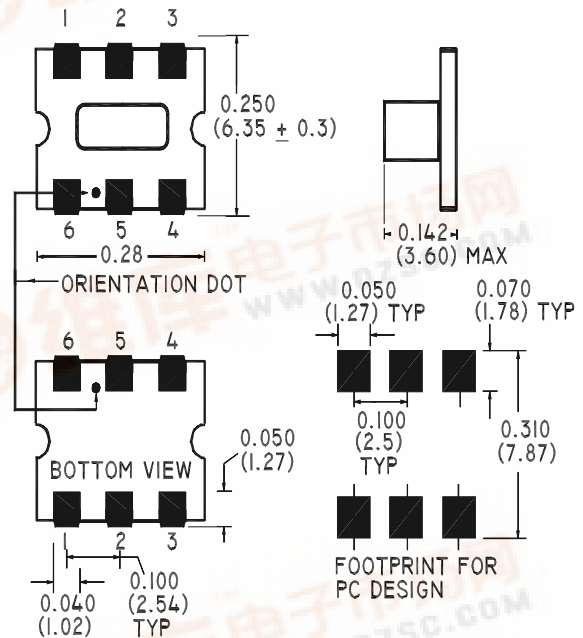
- Coupling 16dB Typical
- Surface Mount
- Low Profile
- Tape and Reel Packaging available



Description

M/A-COM's ELDC-16 is a high performance 75 Ohm Coupler, in a SM-55 low cost, surface mount package. The ELDC-16 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, Z₀ = 75 Ohms

Frequency Range	Units	Nominal	Typical	Minimum	Maximum
Mainline Loss	5 - 870 MHz	—	0.6	—	0.9
	870 - 1000 MHz	—	0.9	—	1.2
Coupling	5 - 870 MHz	16	—	—	± 0.8
	870 - 1000 MHz	16	—	—	± 0.9
Coupling Flatness	dB	—	—	—	0.9
Directivity	5 - 870 MHz	—	14	10	—
	870 - 1000 MHz	—	12	8	—
Input Return Loss	5 - 50 MHz	—	24	20	—
	50 - 870 MHz	—	22	18	—
	870 - 1000 MHz	—	20	18	—
Output Return Loss	5 - 50 MHz	—	25	22	—
	50 - 870 MHz	—	22	20	—
	870 - 1000 MHz	—	20	18	—
Coupled Return Loss	5 - 50 MHz	—	23	20	—
	50 - 870 MHz	—	21	18	—
	870 - 1000 MHz	—	20	17	—



Operating Characteristics

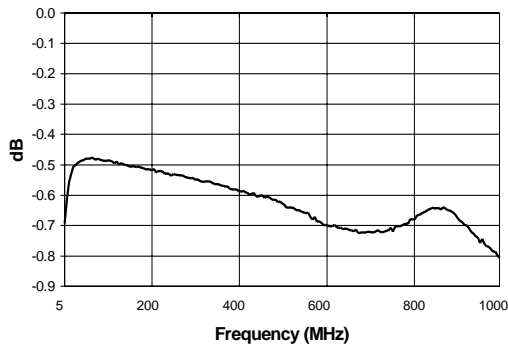
Function	Pin No.
Input	6
Output	1
Coupled	4
External 75 Ohms	3
Ground	5
Not Connected	2

Absolute Maximum Ratings

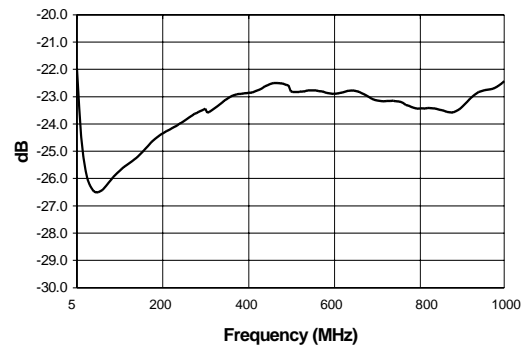
Parameter	Absolute Maximum
RF Power	250 mW
DC Current	30 mA
Pin Temperature (10 sec)	260°C
Operating/Storage Temperature	-40°C to +85°C

Typical Performance @ 25°C

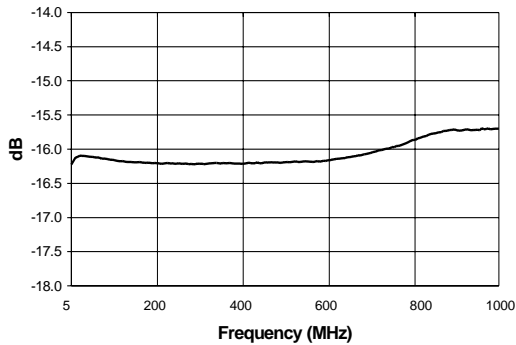
Mainline Loss



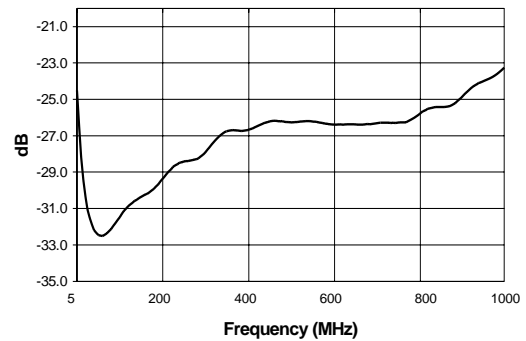
Input Return Loss



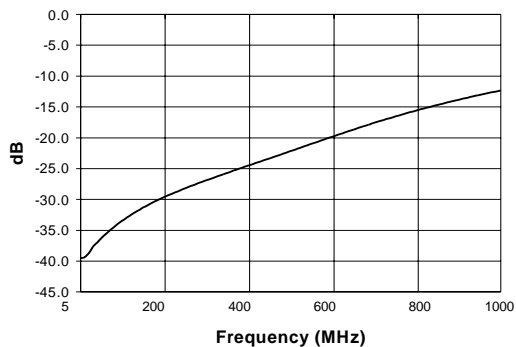
Coupling



Output Return Loss



Directivity



Coupled Port Return Loss

