



E-Series 75 Ohm Coupler 5 - 1000 MHz

Features

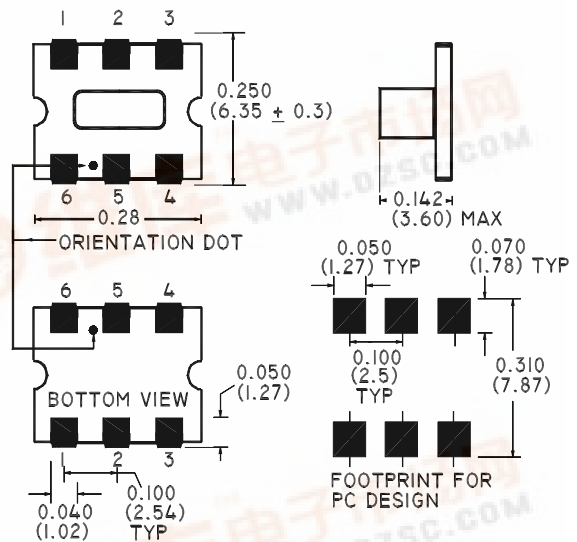
- Coupling 20dB Typical
- Surface Mount
- Low Profile
- Tape and Reel Packaging available



SM-55 Package

Description

M/A-COM's ELDC-20 is a high performance 75 Ohm Coupler, in a SM-55 low cost, surface mount package. The ELDC-20 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 - 50 MHz	dB	—	0.6	—	0.7
	50 - 870 MHz	dB	—	0.45	—	0.65
	870 - 1000 MHz	dB	—	0.6	—	0.7
Coupling	5 - 870 MHz	dB	20	—	—	± 0.8
	870 - 1000 MHz	dB	20	—	—	± 1.0
Coupling Flatness		dB	—	—	—	± 0.5
Directivity	5 - 870 MHz	dB	—	14	10	—
	870 - 1000 MHz	dB	—	9	7	—
Input Return Loss	5 - 50 MHz	dB	—	22	20	—
	50 - 1000 MHz	dB	—	27	22	—
Output Return Loss	5 - 50 MHz	dB	—	22	20	—
	50 - 1000 MHz	dB	—	28	22	—
Coupled Return Loss	5 - 50 MHz	dB	—	22	20	—
	50 - 1000 MHz	dB	—	27	20	—



Operating Characteristics

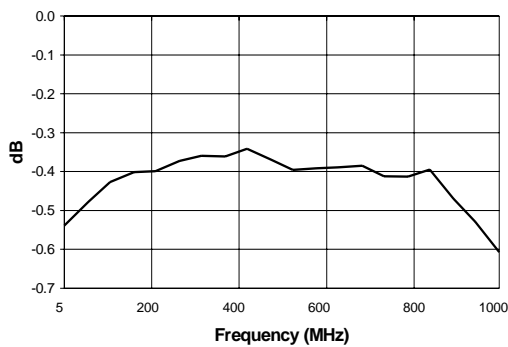
Function	Pin No.
Input	6
Output	1
Coupled	4
Isolated	3
Ground	5
Not Connected	2

Absolute Maximum Ratings

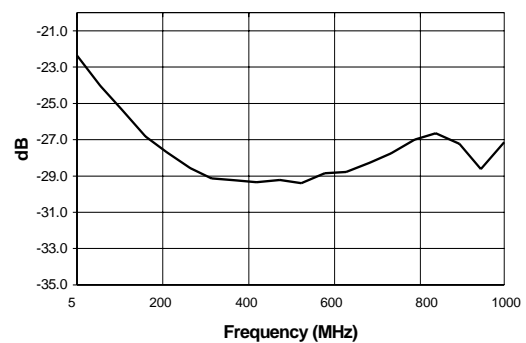
Parameter	Absolute Maximum
RF Power	250 mW
DC Current	30 mA
Pin Temperature (10 sec)	260°C
Operating/Storage Temperature	-40°C to +85°C

Typical Performance @ 25°C

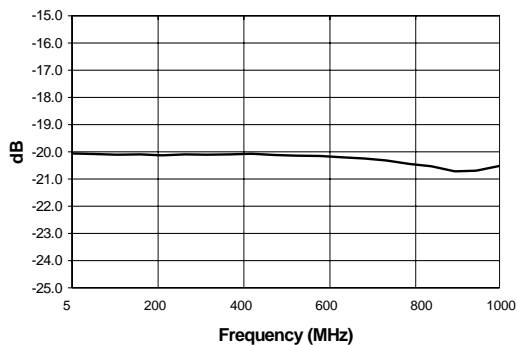
Mainline Loss



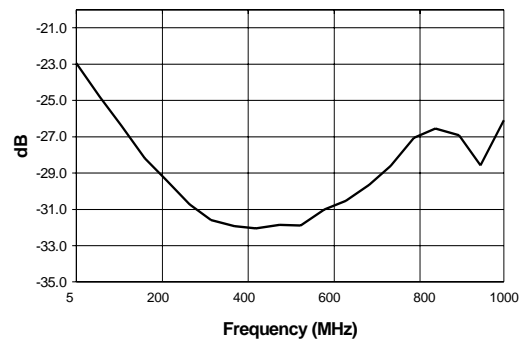
Input Return Loss



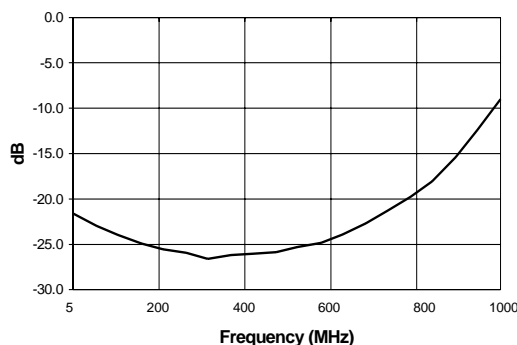
Coupling



Output Return Loss



Directivity



Coupled Port Return Loss

