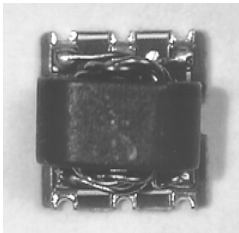




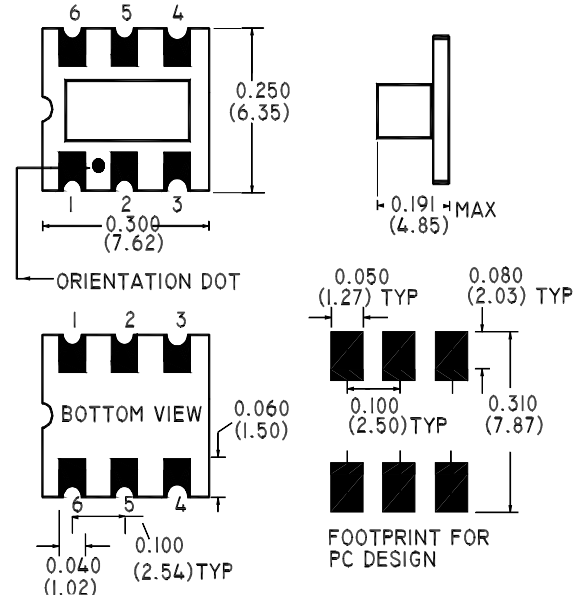
E-Series 75 Ohm Coupler 5 - 870 MHz

Features

- Low Intermod Distortion
- Coupling 8.5dB Typical
- Surface Mount
- Tape and Reel Packaging available



SM - 115



Description

M/A-COM's ELDC-8LI-1 is a high performance 75 Ohm Coupler, in a SM-115 low cost, surface mount package. The ELDC-8LI-1 is specifically designed for extremely low intermod distortion in CATV applications.

Electrical Specifications @25°C

| Frequency Range | 5 - 870 MHz | Units | Nominal | Typical | Minimum | Maximum |
|---------------------|---------------|-------|---------|---------|---------|---------|
| Mainline Loss | 5 - 870 MHz | dB | — | 1.8 | — | 2.9 |
| Coupling | 5 - 870 MHz | dB | 8.3 | — | — | ± 0.5 |
| Coupling Flatness | | dB | — | — | — | 1.0 |
| Isolation | 5 - 250 MHz | dB | — | 28 | 23 | — |
| | 250 - 500 MHz | dB | — | 24 | 20 | — |
| | 500 - 870 MHz | dB | — | 18 | 15 | — |
| Input Return Loss | 5 - 20 MHz | dB | — | 17 | 15 | — |
| | 20 - 500 MHz | dB | — | 20 | 17 | — |
| | 500 - 870 MHz | dB | — | 16 | 13 | — |
| Output Return Loss | 5 - 450 MHz | dB | — | 28 | 20 | — |
| | 450 - 650 MHz | dB | — | 18 | 16 | — |
| | 650 - 870 MHz | dB | — | 16 | 14 | — |
| Coupled Return Loss | 40 - 600 MHz | dB | — | 17 | 15 | — |
| | 600 - 870 MHz | dB | — | 20 | 17 | — |
| | 650 - 870 MHz | dB | — | 17 | 15 | — |

Please Note that the photograph above indicates package shape only, unit may be wired differently.

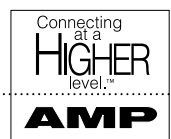
S 1491 C



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Specifications subject to change without notice.



Operating Characteristics

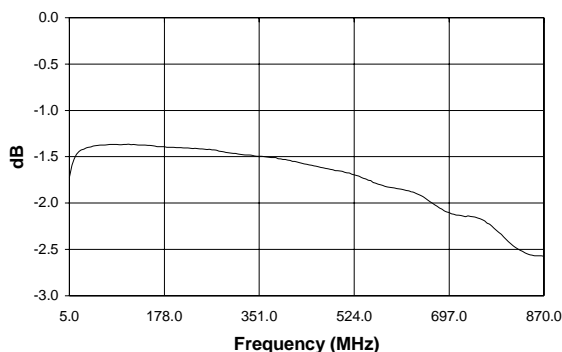
| Function | Pin No. |
|------------------|---------|
| Input | 6 |
| Output | 1 |
| Coupled | 4 |
| Ground | 5 |
| Not Connected | 2 |
| External 75 Ohms | 3 |

Absolute Maximum Ratings

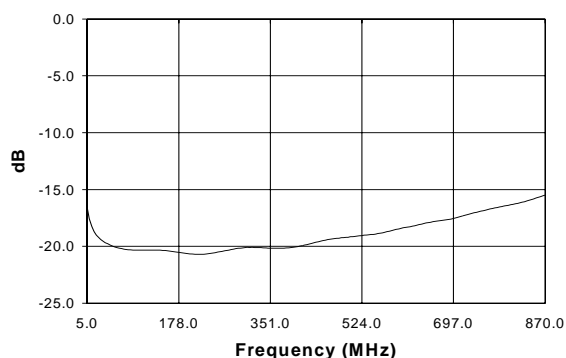
| Parameter | Absolute Maximum |
|-------------------------------|------------------|
| RF Power | 250 mW |
| DC Current | 30 mA |
| Pin Temperature (10 sec) | 260°C |
| Operating/Storage Temperature | -40°C to +85°C |

Typical Performance @ 25°C

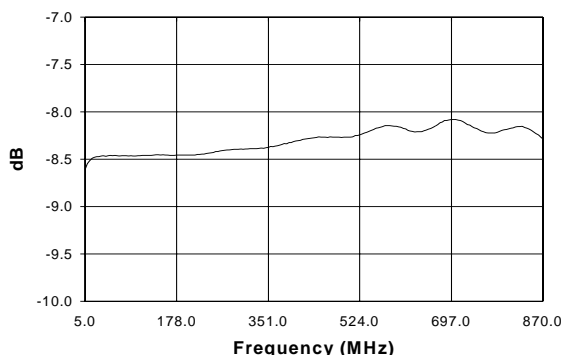
Mainline Loss



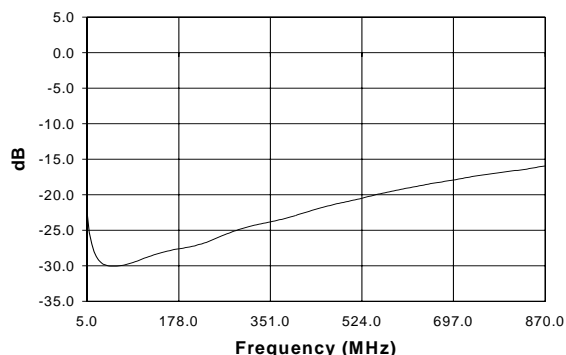
Input Return Loss



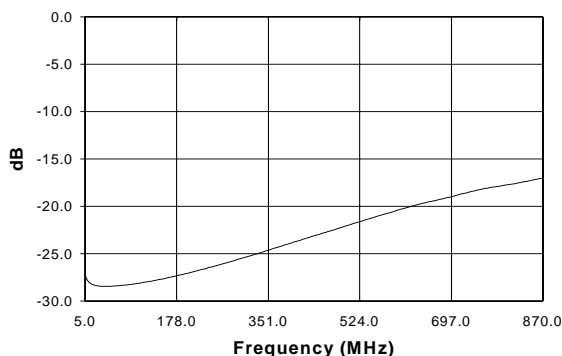
Coupling



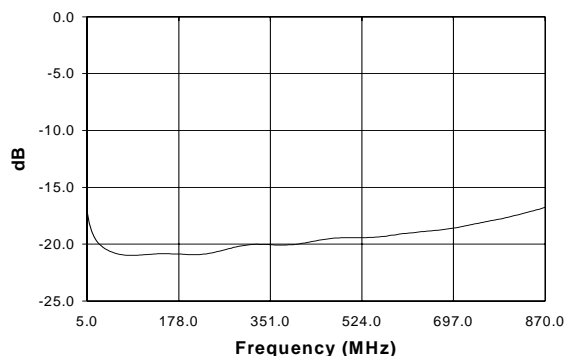
Output Return Loss



Isolation



Coupled Port Return Loss



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