

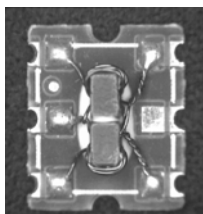
E-Series 75 Ohm Coupler

5 - 1000 MHz



Features

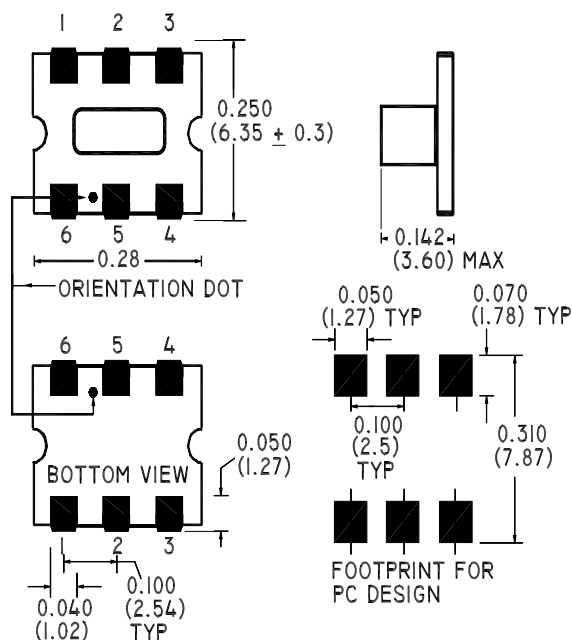
- Coupling 16dB Typical
- Surface Mount
- Low Profile
- Tape and Reel Packaging available



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

S 1360 D

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PRELIMINARY: Data Sheets contain information regarding a product M/A-COM Technology Solutions has under development. Performance is based on engineering tests. Specifications are typical. Mechanical outline has been fixed. Engineering samples and/or test data may be available. Commitment to produce in volume is not guaranteed.

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Operating Characteristics

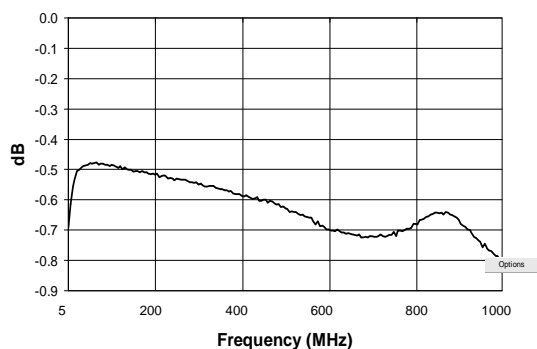
| Function | Pin No. |
|------------------|---------|
| Input | 6 |
| Output | 1 |
| Coupled | 4 |
| External 75 Ohms | 3 |
| Ground | 5 |
| Not Connected | 2 |

Absolute Maximum Ratings

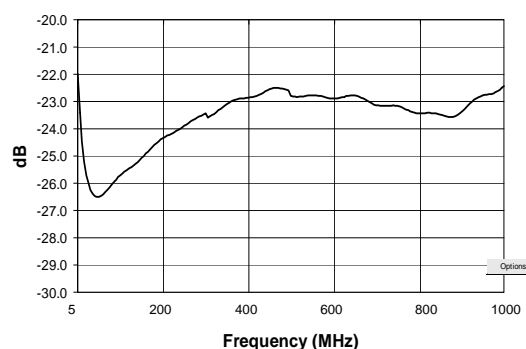
| Parameter | Absolute Maximum |
|-------------------------------|------------------|
| RF Power | 250 mW |
| DC Current | 30 mA |
| Pin Temperature (10 sec) | 260°C |
| Operating/Storage Temperature | -40°C to +85°C |

Typical Performance @ 25°C

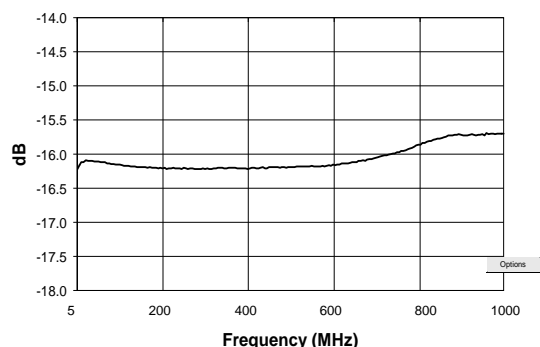
Mainline Loss



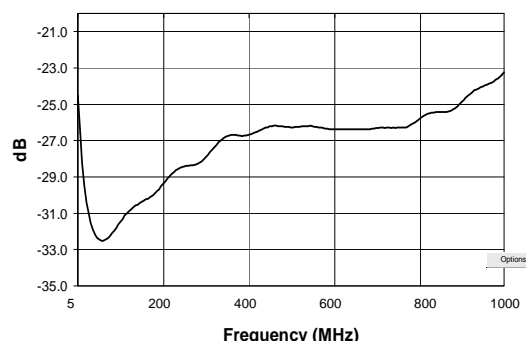
Input Return Loss



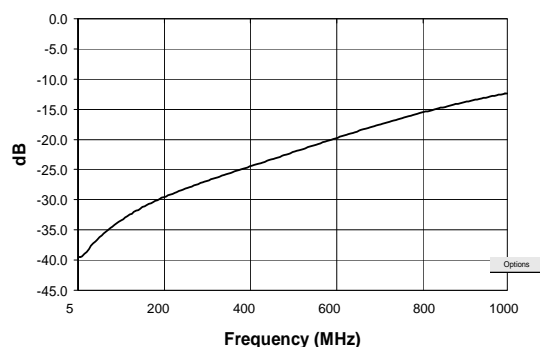
Coupling



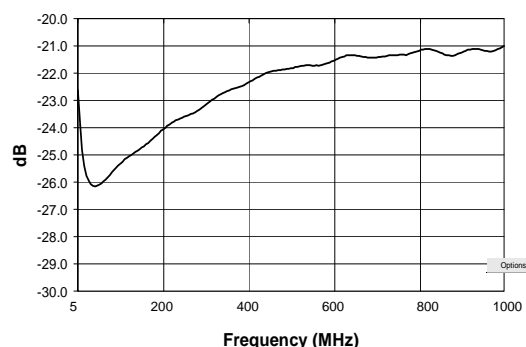
Output Return Loss



Directivity



Coupled Port Return Loss



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