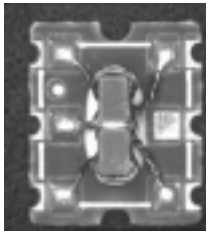




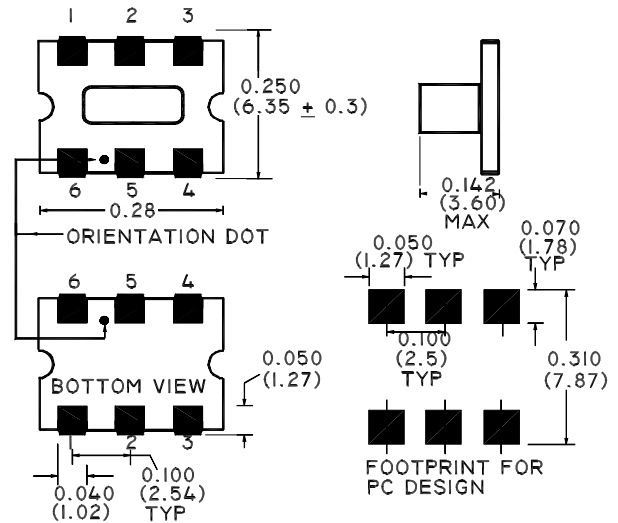
E-Series 75 Ohm Coupler 5 - 1000 MHz

Features

- Coupling 14db Typical
- Surface Mount
- Tape and Reel Packaging available



SM-55 Package



Description

M/A-COM's ELDC-14 is a high performance 75 Ohm Coupler, in an SM-55 low cost, surface mount package. The ELDC-14 is designed for use in high volume CATV applications. Typical applications include Set-top Boxes, Network Interface Units, Cable Amplifiers and Headend equipment.

Electrical Specifications @25°C, Z₀ = 75 Ohms

| Frequency Range | Units | Nominal | Typical | Minimum | Maximum |
|---------------------|----------------|---------|---------|---------|---------|
| Mainline Loss | 5 - 870 MHz | dB | — | 0.8 | 1.5 |
| | 870 - 1000 MHz | dB | — | 1.0 | 1.8 |
| Coupling | 5 - 870 MHz | dB | 14.3 | — | ± 0.5 |
| | 870 - 1000 MHz | dB | 14.3 | — | ± 0.7 |
| Coupling Flatness | dB | — | — | — | 0.8 |
| Directivity | 5 - 870 MHz | dB | — | 25 | 15 |
| | 870 - 1000 MHz | dB | — | 20 | 13 |
| Input Return Loss | 5 - 870 MHz | dB | — | 25 | 20 |
| | 870 - 1000 MHz | dB | — | 23 | 18 |
| Output Return Loss | 5 - 870 MHz | dB | — | 25 | 20 |
| | 870 - 1000 MHz | dB | — | 25 | 20 |
| Coupled Return Loss | 5 - 870 MHz | dB | — | 23 | 18 |
| | 870 - 1000 MHz | dB | — | 23 | 18 |

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

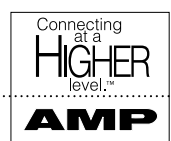
S 1371 D



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Operating Characteristics

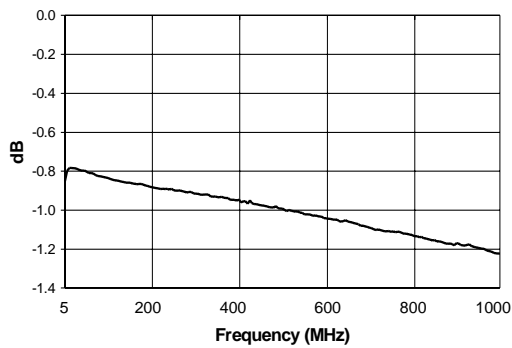
| Function | Pin No. |
|------------------|---------|
| Input | 6 |
| Output | 1 |
| Coupled | 4 |
| External 75 Ohms | 3 |
| Ground | 5 |
| Not Connected | 2 |

Absolute Maximum Ratings

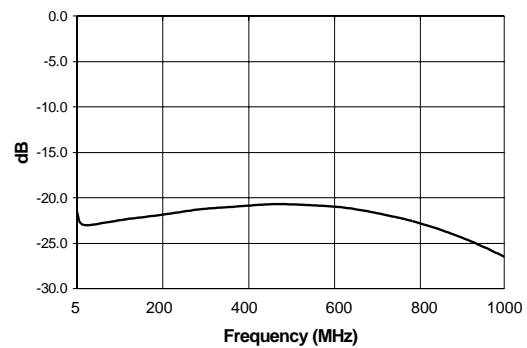
| Parameter | Absolute Maximum |
|-------------------------------|------------------|
| RF Power | 250 mW |
| DC Current | 30 mA |
| Pin Temperature (10 sec) | 260°C |
| Operating/Storage Temperature | -40°C to +85°C |

Typical Performance @ 25°C

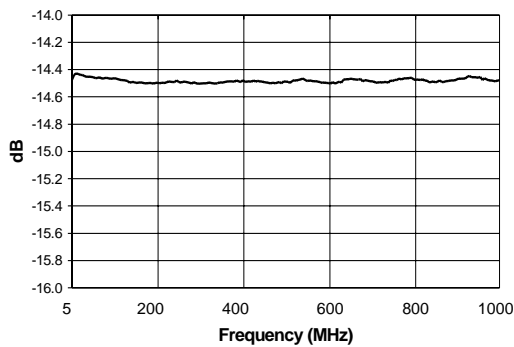
Mainline Loss



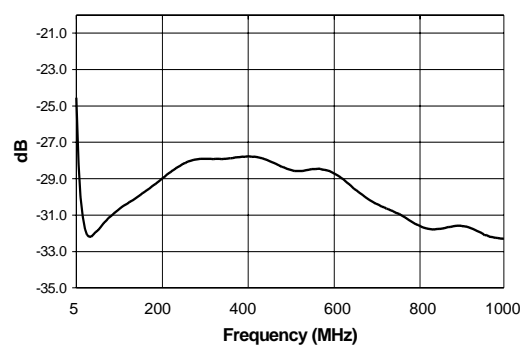
Input Return Loss



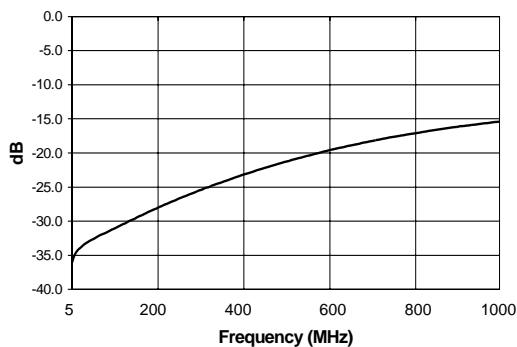
Coupling



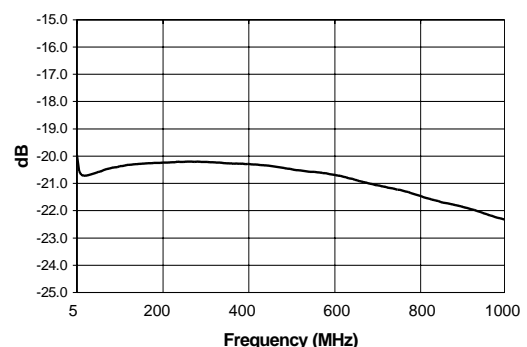
Output Return Loss



Directivity



Coupled Port Return Loss



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