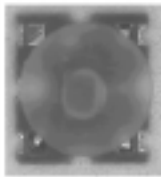




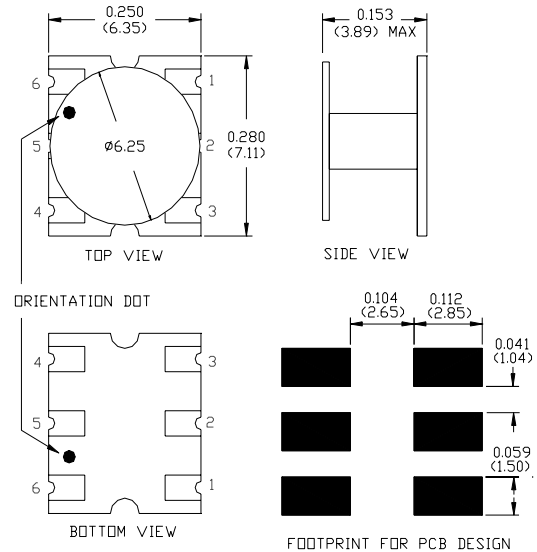
## E-Series 75 Ohm Coupler 5 - 1000 MHz

### Features

- Coupling 17db Typical
- Surface Mount
- Tape and Reel Packaging available



### SM-127 Package



### Description

M/A-COM's EMDC-17-8-75 is a 75 Ohm Coupler, in a low cost, surface mount package. The EMDC-17-8-75 is ideally suited for use in high volume CATV applications.

### Electrical Specifications @25°C, Z<sub>0</sub> = 75 Ohms

| Frequency Range     | 5 - 1000 MHz   | Units | Nominal | Typical | Minimum | Maximum |
|---------------------|----------------|-------|---------|---------|---------|---------|
| Mainline Loss       | 5 - 860 MHz    | dB    | —       | 0.6     | —       | 1.0     |
|                     | 860 - 1000 MHz | dB    | —       | 0.8     | —       | 1.2     |
| Coupling            | 5 - 860 MHz    | dB    | 17.2    | —       | —       | ± 0.7   |
|                     | 860 - 1000 MHz | dB    | 17      | —       | —       | ± 0.8   |
| Coupling Flatness   |                | dB    | —       | —       | —       | 1.0     |
| Directivity         | 5 - 50 MHz     | dB    | —       | 40      | 30      | —       |
|                     | 50 - 500 MHz   | dB    | —       | 20      | 12      | —       |
|                     | 500 - 1000 MHz | dB    | —       | 12      | 5       | —       |
| Input Return Loss   | 5 - 50 MHz     | dB    | —       | 28      | 24      | —       |
|                     | 50 - 500 MHz   | dB    | —       | 28      | 24      | —       |
|                     | 500 - 1000 MHz | dB    | —       | 25      | 20      | —       |
| Output Return Loss  | 5 - 50 MHz     | dB    | —       | 25      | 20      | —       |
|                     | 50 - 500 MHz   | dB    | —       | 25      | 20      | —       |
|                     | 500 - 1000 MHz | dB    | —       | 23      | 20      | —       |
| Coupled Return Loss | 5 - 50 MHz     | dB    | —       | 25      | 20      | —       |
|                     | 50 - 500 MHz   | dB    | —       | 25      | 20      | —       |
|                     | 500 - 1000 MHz | dB    | —       | 23      | 18      | —       |

\*Notes:

1. Core is coated with Paralyene C, 0.005" thick minimum.
2. Wire is heavy poly-nylon coated, rated to 180C.

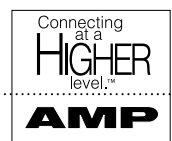
S 1400 E



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## Operating Characteristics

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

## Absolute Maximum Ratings

| Parameter             | Absolute Maximum |
|-----------------------|------------------|
| RF Power              | 250 mW           |
| DC Current            | 30 mA            |
| Storage Temperature   | -40°C to +85°C   |
| Operating Temperature | -40°C to +85°C   |

S 1400 E



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