

E-Series Surface Mount Mixer
10 – 2000 MHz

ESMD-C15
V1

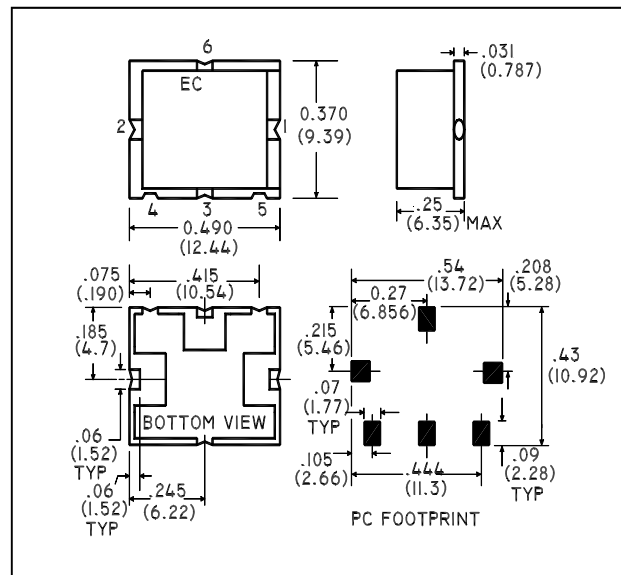
Features

- LO Power +10 dBm
- Up to +5 dBm RF
- Low Profile
- Surface Mount
- Tape and reel packaging available

Description

M/A-COM's ESMD-C15 is a Low Cost, Broadband, high performance Mixer designed for use in high volume wireless applications. The device has been optimised by careful selection of the Schottky Diode and Balun Transformer for excellent performance. ESMD-C15 is available in an SM-2 surface mount package and reflows using standard soldering reflow profiles. Parts are packaged in tape & reel.

SM - 2 Package



Electrical Specifications: $T_A = 25^\circ\text{C}$, $Z_0 = 50\Omega$ ¹, LO = +10 dBm

| Parameter | Test Conditions | Frequency | Units | Min | Typ | Max |
|------------------------|-----------------|------------------------|-------|-----|------------|------------|
| RF Frequency | — | 10 - 2000 | MHz | — | — | — |
| LO Frequency | — | 10 - 2000 | MHz | — | — | — |
| IF Frequency | — | 10 - 800 | MHz | — | — | — |
| Conversion Loss | — | 20 - 1000 10 - 2000 | dB | — | 6.5 7.5 | 7.5 9.5 |
| Isolation | LO to RF | 10 - 2000 | dB | 20 | 35 | — |
| Isolation | LO to IF | 10 - 2000 | dB | 15 | 30 | — |
| Input 1 dB Compression | — | 1 - 1000 | dBm | — | — | 5 |

Ordering Information

| Part Number | Package |
|-------------|--------------------------------|
| ESMD-C15TR | Tape and Reel (500 piece Reel) |

1

M/A-COM Inc. and its affiliates reserve the right to make changes to the product(s) or information contained herein without notice. M/A-COM makes no warranty, representation or guarantee regarding the suitability of its products for any particular purpose, nor does M/A-COM assume any liability whatsoever arising out of the use or application of any product(s) or information.

• **North America** Tel: 800.366.2266 / Fax: 978.366.2266
 • **Europe** Tel: 44.1908.574.200 / Fax: 44.1908.574.300
 • **Asia/Pacific** Tel: 81.44.844.8296 / Fax: 81.44.844.8298

Visit www.macom.com for additional data sheets and product information.

Pin Configuration

| Pin No. | Function |
|---------|----------|
| 1 | RF |
| 2 | LO |
| 3 | IF |
| 4 | Ground |
| 5 | Ground |
| 6 | Ground |

Absolute Maximum Ratings ¹

| Parameter | Absolute Maximum |
|------------------------------|------------------|
| RF Power | 50 mW |
| Peak IF Current | 40 mA |
| Operating Temperature | -55°C to +100°C |
| Storage Temperature | -55°C to +125°C |
| Pin Temperature (10 seconds) | +260°C |

1. Operation of this device above any one of these parameters may cause permanent damage.