

**E-Series Surface Mount Mixer**  
10 – 2000 MHz

**ESMD-C15**  
**V1**

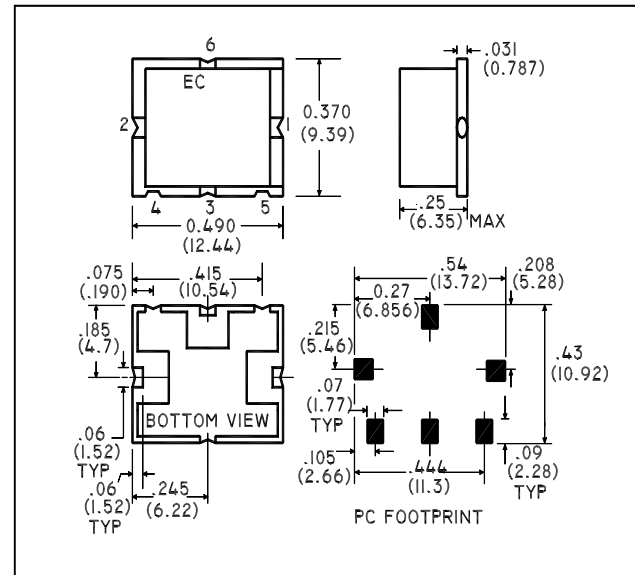
**Features**

- 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:  $T_A = 25^\circ\text{C}$ ,  $Z_0 = 50\Omega$ <sup>1</sup>, 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)

**Pin Configuration**

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

**Absolute Maximum Ratings <sup>1</sup>**

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.