

**E-Series Surface Mount Mixer**  
5 – 2500 MHz

**EMRS-25MH**  
**V4**

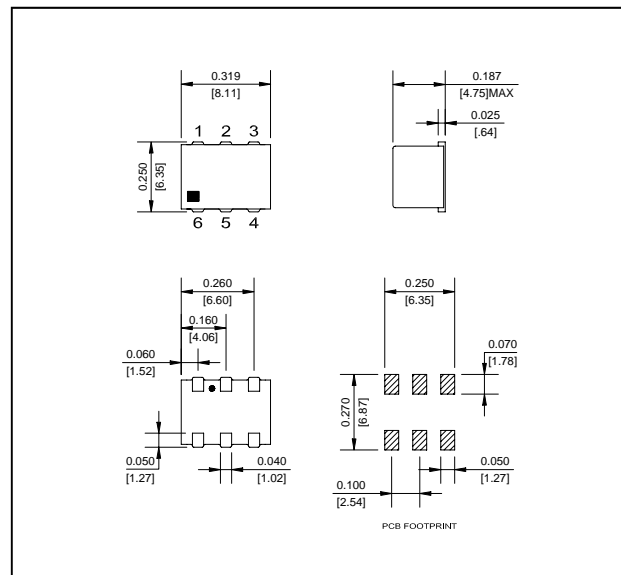
**Features**

- LO Power +13 dBm
- Up to +9 dBm RF
- Low Profile
- Surface Mount
- Tape and reel packaging available

**Description**

M/A-COM's EMRS-25MH is a Low Cost, Broadband, high performance Double Balanced 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. EMRS-25MH is available in an SM-1 surface mount package and reflows using standard soldering reflow profiles. Parts are packaged in tape & reel.

**SM - 1 Package**



**Electrical Specifications:  $T_A = 25^\circ\text{C}$ ,  $Z_0 = 50\Omega$ <sup>1</sup>, LO = +13 dBm**

Parameter	Test Conditions	Frequency	Units	Min	Typ	Max
RF Frequency	—	5 - 2500	MHz	—	—	—
LO Frequency	—	5 - 2500	MHz	—	—	—
IF Frequency	—	5 - 1500	MHz	—	—	—
Conversion Loss	—	10 - 1250 5 - 2500	dB dB	— —	6.3 7.3	8.5 9.8
Isolation	LO to RF	5 - 50 50 - 1250 1250 - 2500	dB dB dB	45 35 30	28 23 20	— — —
Isolation	LO to IF	5 - 50 50 - 1250 1250 - 2500	dB dB dB	40 30 25	23 20 17	— — —
Input 1 dB Compression	—	5 - 2500	dBm	—	—	1

**Ordering Information**

Part Number	Package
EMRS-25MHTR	Tape and Reel (900 piece Reel)

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**Pin Configuration**

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

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

Parameter	Absolute Maximum
RF Power	150 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.