

**E-Series Surface Mount Mixer**  
350 – 2000 MHz

**EMRS-11F**  
V4

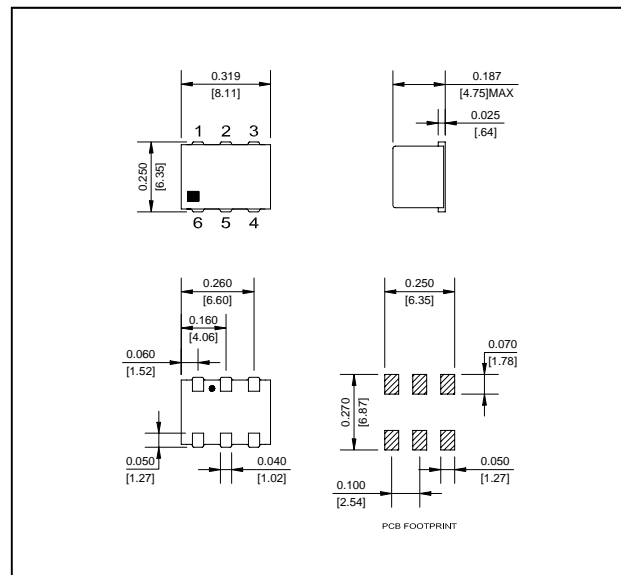
**Features**

- LO Power +7 dBm
- Up to +1 dBm RF
- Low Profile
- Surface Mount
- Tape and reel packaging available

**Description**

M/A-COM's EMRS-11F 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-11F 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 = +7 dBm**

Parameter	Test Conditions	Frequency	Units	Min	Typ	Max
RF Frequency	—	350 - 2000	MHz	—	—	—
LO Frequency	—	350 - 2000	MHz	—	—	—
IF Frequency	—	DC - 400	MHz	—	—	—
Conversion Loss	—	350 - 1000	dB	—	5.5	7.0
		350 - 2000	dB	—	6.8	9.2
Isolation	LO to RF	350 - 750	dB	20	25	—
		750 - 1000	dB	18	25	—
		1000 - 2000	dB	20	30	—
Isolation	LO to IF	350 - 750	dB	14	22	—
		750 - 1000	dB	22	29	—
		1000 - 2000	dB	22	28	—
Input 1 dB Compression	—	350 - 2000	dBm	—	—	1

**Ordering Information**

Part Number	Package
EMRS-11FTR	Tape and Reel (900 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](http://www.macom.com) for additional data sheets and product information.

**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	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.