

E-Series Surface Mount Mixer 350 – 2000 MHz

**ELCM-11F
V3**

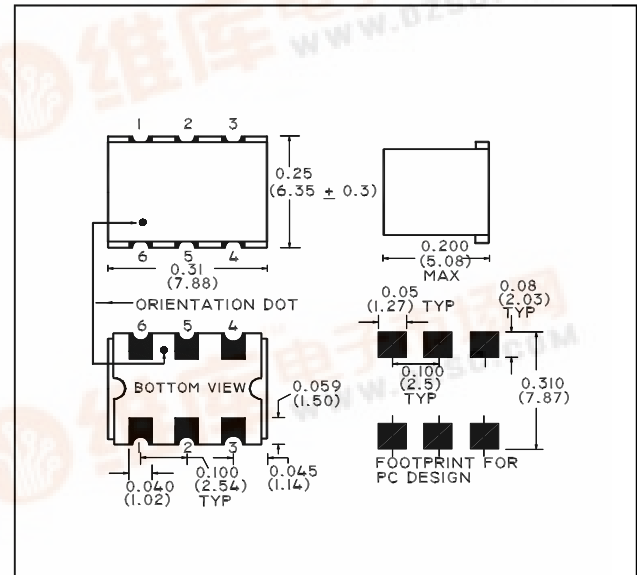
Features

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

Description

M/A-COM's ELCM-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. ELCM-11F is available in an SM-87 surface mount package and reflows using standard soldering reflow profiles. Parts are packaged in tape & reel.

SM - 87 Package



Electrical Specifications: $T_A = 25^\circ\text{C}$, $Z_0 = 50\Omega$ ¹, 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 350 - 2000	dB dB	— —	5.5 6.8	7.0 9.2
Isolation	LO to RF	350 - 750 750 - 1000 1000 - 2000	dB dB dB	26 20 20	37 36 32	— — —
Isolation	LO to IF	350 - 750 750 - 1000 1000 - 2000	dB dB dB	14 20 20	22 29 28	— — —
Input 1 dB Compression	—	0.5 - 500	dBm	—	—	1

Ordering Information

Part Number	Package
ELCM-11FTR	Tape and Reel (900 piece Reel)

• **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

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Pin Configuration

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

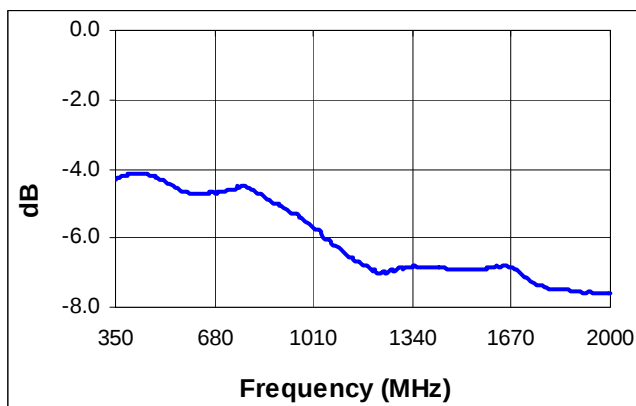
Absolute Maximum Ratings ¹

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

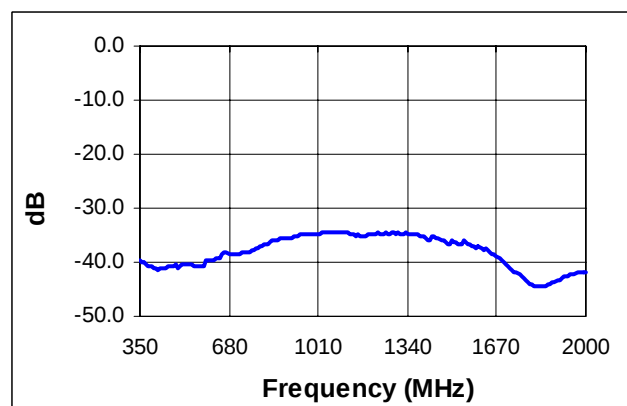
1. Operation of this device above any one of these parameters may cause permanent damage.

Typical Performance Curves

Conversion Loss



LO - RF Isolation



LO - IF Isolation

