

E-Series Surface Mount Mixer
5 – 1900 MHz

ELCM-11X
V1

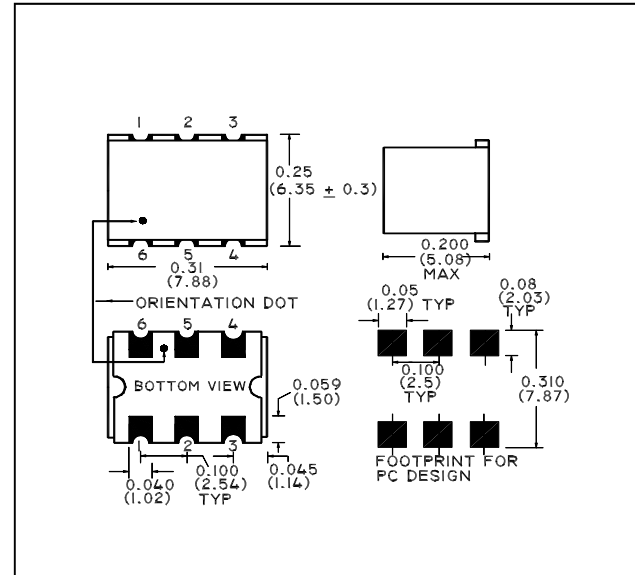
Features

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

Description

M/A-COM's ELCM-11X 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-11X 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	—	5 - 1900	MHz	—	—	—
LO Frequency	—	5 - 1900	MHz	—	—	—
IF Frequency	—	5 - 1000	MHz	—	—	—
Conversion Loss	—	10 - 950 5 - 1900	dB dB	— —	7.2 7.4	8.0 9.8
Isolation	LO to RF	5 - 50 50 - 950 950 - 1900	dB dB dB	45 20 18	50 35 27	— — —
Isolation	LO to IF	5 - 50 50 - 950 950 - 1900	dB dB dB	45 20 20	56 37 27	— — —
Input 1 dB Compression	—	0.5 - 500	dBm	—	—	1

Ordering Information

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

Pin Configuration

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

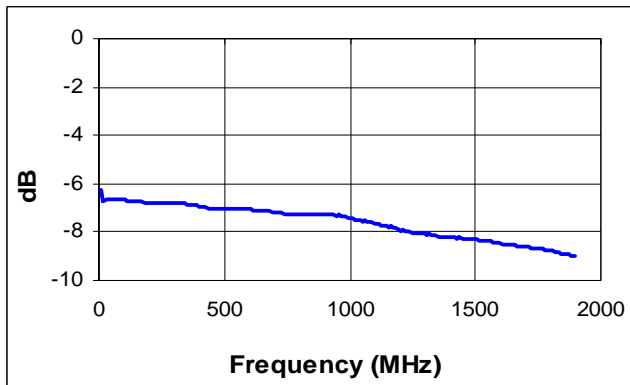
Absolute Maximum Ratings ¹

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

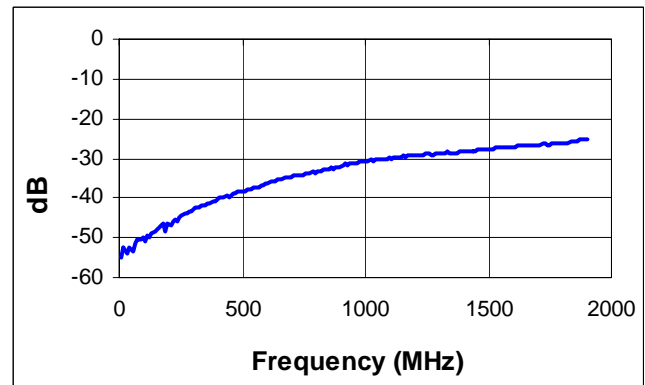
1. Operation of this device above any one of these parameters may cause permanent damage.

Typical Performance Curves

Conversion Loss



LO - RF Isolation



LO - IF Isolation

