



M/A-COM

ELCM-11X

E-Series Surface Mount Mixer 5 – 1900 MHz



Features

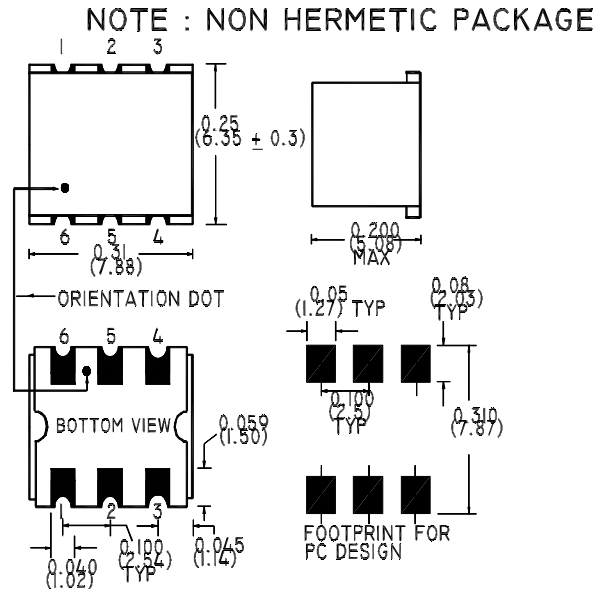
- LO Power +7 dBm
- Up to +1 dBm RF
- Surface Mount



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.

SM-87 Package



Electrical Specifications @ +25°C, Z₀ = 50 Ohms, LO = +7dBm

Parameter	Units	Minimum	Typical	Maximum
Frequency Range				
RF	5 - 1900	—	—	—
LO	5 - 1900	—	—	—
IF	5 - 1000	—	—	—
Conversion Loss				
10 - 950	dB	—	7.2	8.0
5 - 1900	dB	—	7.4	9.8
Isolation (LO - RF)				
5 - 50	MHz	45	50	—
50 - 950	MHz	20	35	—
950 - 1900	MHz	18	27	—
Isolation (LO - IF)				
5 - 50	MHz	45	56	—
50 - 950	MHz	20	37	—
950 - 1900	MHz	20	27	—
RF Input for 1dB Compression	dBm	—	—	+1

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Absolute Maximum Ratings

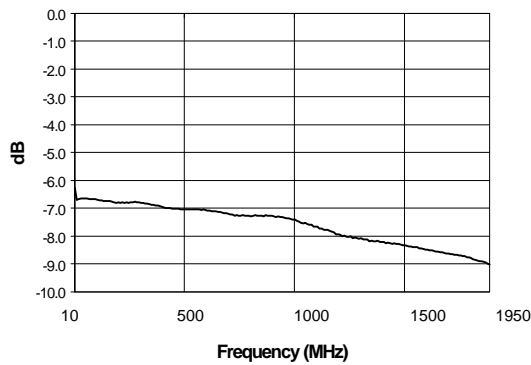
Parameter	Absolute Maximum
RF Power	150 mW
Peak IF Current	40 mA
Storage Temperature	-55°C to +100°C
Operating Temperature	-55°C to +100°C
Pin Temperature (10 Seconds)	260°C

Functional Configuration

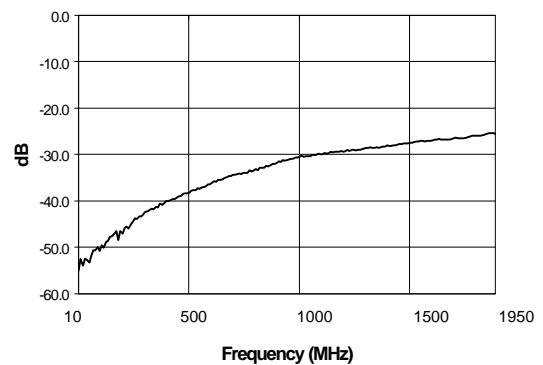
Function	Pin No.
LO	1
RF	5
IF	4
Ground	2, 3, 6
Case Ground	—
Unconnected	—

Typical Performance @ +25°C

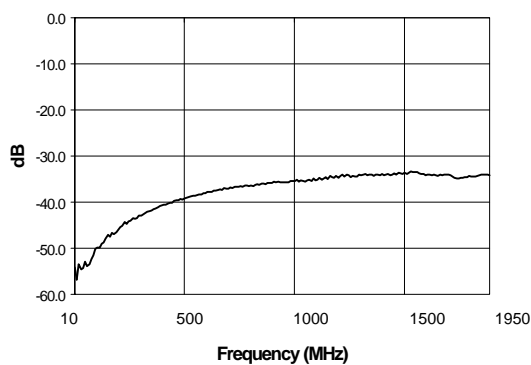
Conversion Loss



L-R Isolation



L-X Isolation



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