

E-Series Surface Mount Mixer

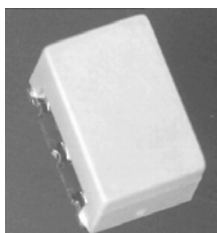
5 – 1900 MHz

ELCM-11X



Features

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

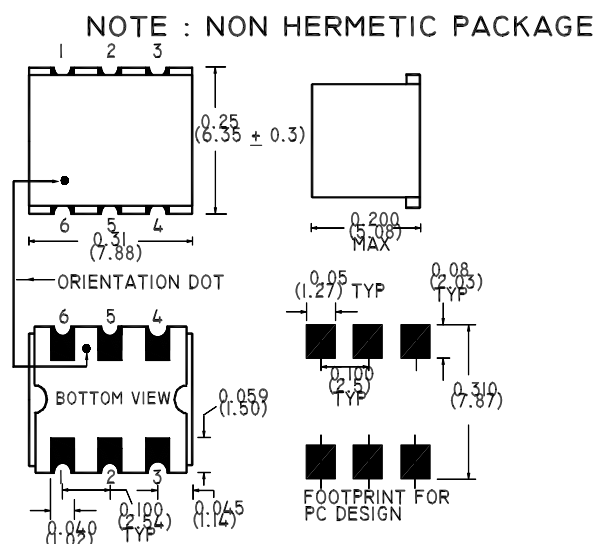


Description

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

Note: Non Hermetic Package



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

Parameter	Units	Minimum	Typical	Maximum
Frequency Range				
RF 5 - 1900	MHz	—	—	—
LO 5 - 1900	MHz	—	—	—
IF 5 - 1000	MHz	—	—	—
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

V2.00 S 1405 A

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PRELIMINARY: Data Sheets contain information regarding a product M/A-COM Technology Solutions has under development. Performance is based on engineering tests. Specifications are typical. Mechanical outline has been fixed. Engineering samples and/or test data may be available. Commitment to produce in volume is not guaranteed.

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Absolute Maximum Ratings

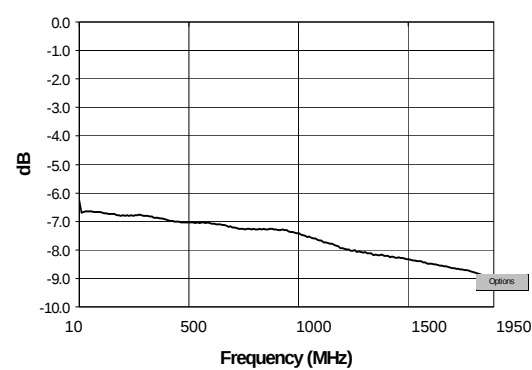
Parameter	Absolute Maximum
RF Power	150 mW
Peak IF Current	40 mA
Storage Temperature	-55°C to +100°C
Operating Temperature	-55°C to +100°C
Pin Temperature (10 Seconds)	260°C

Functional Configuration

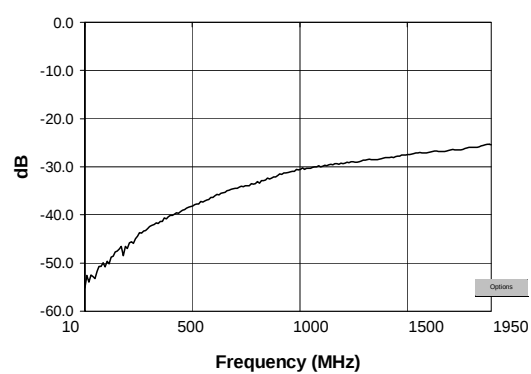
Function	Pin No.
LO	1
RF	5
IF	4
Ground	2, 3, 6
Case Ground	—
Unconnected	—

Typical Performance @ +25°C

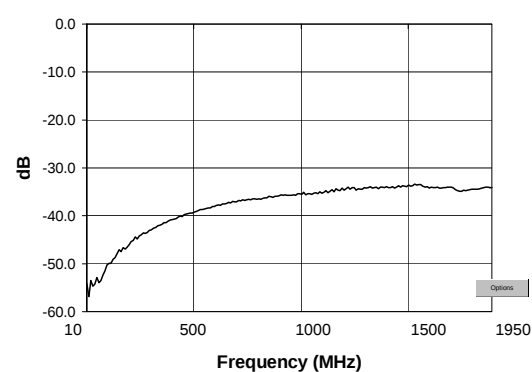
Conversion Loss



L-R Isolation



L-X Isolation



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