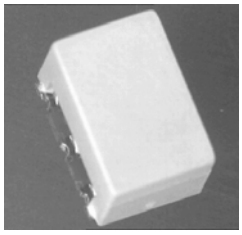
E-Series Surface Mount Mixer
5 – 1500 MHz

Features

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

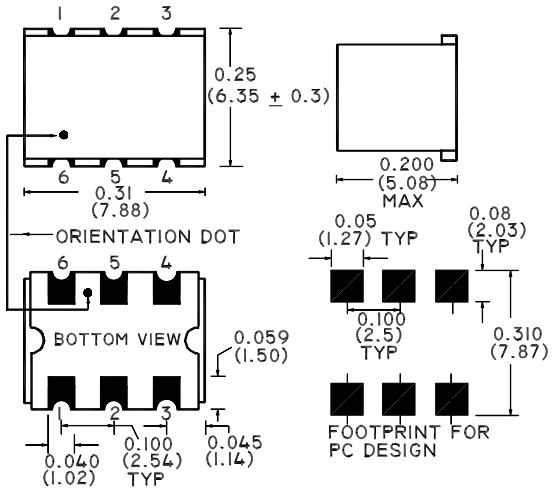


Description

M/A-COM's ELCM-5 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-5 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, Z_0 = 50 Ohms, LO = +7dBm

Parameter	Units	Minimum	Typical	Maximum
Frequency Range				
RF 5 - 1500	MHz	—	—	—
LO 5 - 1500	MHz	—	—	—
IF DC - 1000	MHz	—	—	—
Conversion Loss				
10 - 750	dB	—	6.5	7.5
5 - 1500	dB	—	7.5	9.5
Isolation (LO - RF)				
5 - 50	MHz	40	60	—
50 - 750	MHz	20	40	—
750 - 1500	MHz	18	30	—
Isolation (LO - IF)				
5 - 50	MHz	30	55	—
50 - 750	MHz	18	30	—
750 - 1500	MHz	8	15	—
RF Input for 1dB Compression	dBm	—	—	+1

V3.00 S 1356 B

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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

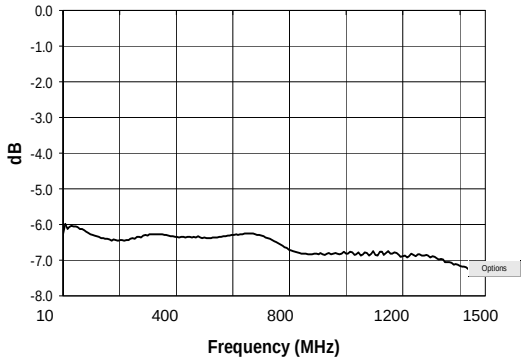
Parameter	Absolute Maximum
RF Power	150 mW
Peak IF Current	40 mA
Storage Temperature	-55°C to +100°C
Operating Temperature	-55°C to +100°C
Pin Temperature (10 Seconds)	260°C

Functional Configuration

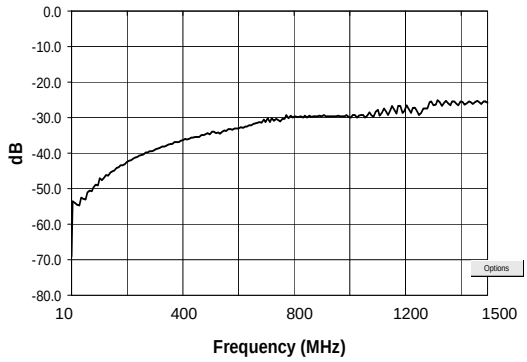
Function	Pin No.
LO	1
RF	4
IF	5
Ground	2, 3, 6
Case Ground	—
Unconnected	—

Typical Performance @ +25°C

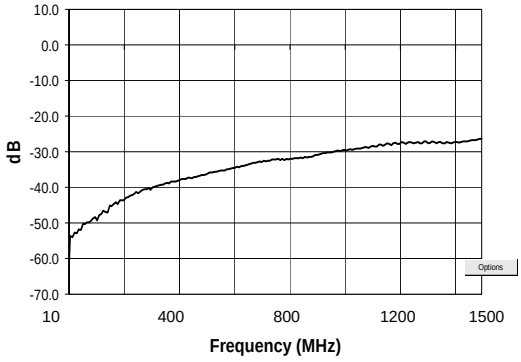
Conversion Loss



L-R Isolation



L-I Isolation



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