

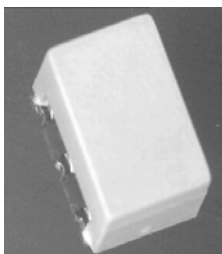
E-Series Surface Mount Mixer

350 – 2000 MHz



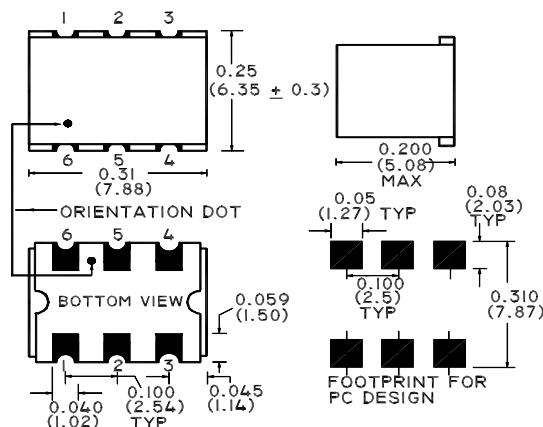
Features

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



SM-87 Package

Note: Non Hermetic Package



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.

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

Parameter	Units	Minimum	Typical	Maximum
Frequency Range				
RF	350 - 2000	MHz	—	—
LO	350 - 2000	MHz	—	—
IF	DC - 400	MHz	—	—
Conversion Loss				
350 - 1000	dB	—	5.5	7.0
Isolation (LO - RF)				
350 - 750	MHz	26	37	—
750 - 1000	MHz	20	36	—
1000 - 2000	MHz	20	32	—
Isolation (LO - IF)				
350 - 750	MHz	14	22	—
750 - 1000	MHz	20	29	—
1000 - 2000	MHz	20	28	—
RF Input for 1dB Compression	dBm	—	—	+1

ADVANCED: Data Sheets contain information regarding a product M/A-COM Technology Solutions is considering for development. Performance is based on target specifications, simulated results, and/or prototype measurements. Commitment to develop is not guaranteed.
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

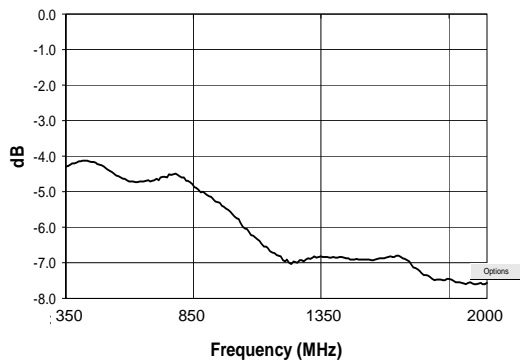
Parameter	Absolute Maximum
RF Power	50 mW
Peak IF Current	40 mA
Storage Temperature	-55°C to +100°C
Operating Temperature	-55°C to +100°C
Pin Temperature (10 Seconds)	260°C

Functional Configuration

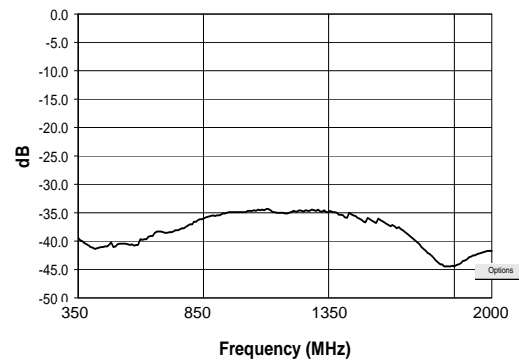
Function	Pin No.
LO	1
RF	4
IF	5
Ground	2, 3, 6
Case Ground	—
Unconnected	—

Typical Performance @ +25°C

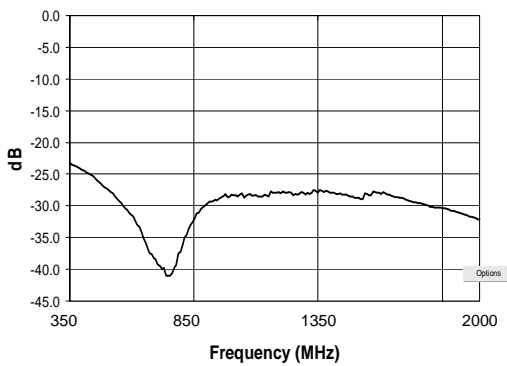
Conversion Loss



L-R Isolation



L-I Isolation



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