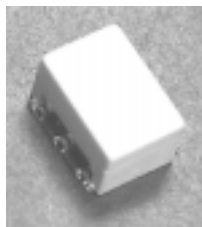


E-Series Surface Mount Mixer 5 – 2500 MHz



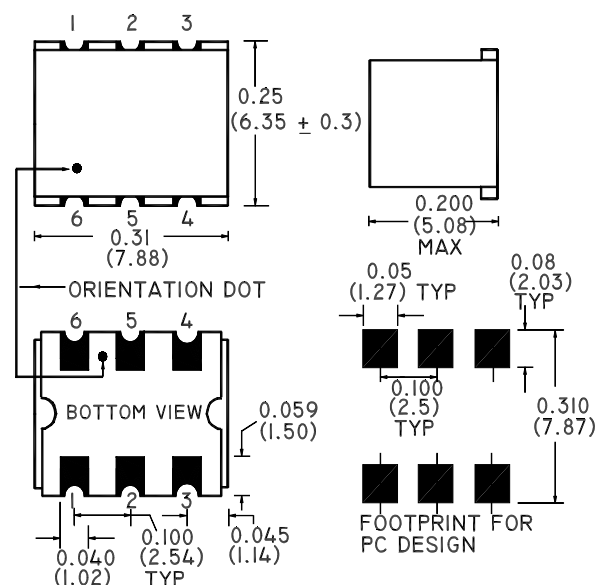
Features

- LO Power +13 dBm
- Up to +9 dBm RF
- Surface Mount



SM-87 Package

Note: Non Hermetic Package



Description

M/A-COM's ELCM-25MH 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-25MH is available in an SM-87 surface mount package and reflows using standard soldering reflow profiles.

Electrical Specifications @ +25°C, Z₀ = 50 Ohms, LO = +13dBm

Parameter	Units	Minimum	Typical	Maximum
Frequency Range				
RF 5 - 2500	MHz	—	—	—
LO 5 - 2500	MHz	—	—	—
IF 5 - 1500	MHz	—	—	—
Conversion Loss				
10 - 1250	dB	—	6.3	8.5
5 - 2500	dB	—	7.3	9.8
Isolation (LO - RF)				
5 - 50	MHz	28	45	—
50 - 1250	MHz	23	35	—
1250 - 2500	MHz	20	30	—
Isolation (LO - IF)				
5 - 50	MHz	23	40	—
50 - 1250	MHz	20	30	—
1250 - 2500	MHz	17	25	—
RF Input for 1dB Compression	dBm	—	—	+9

Absolute Maximum Ratings

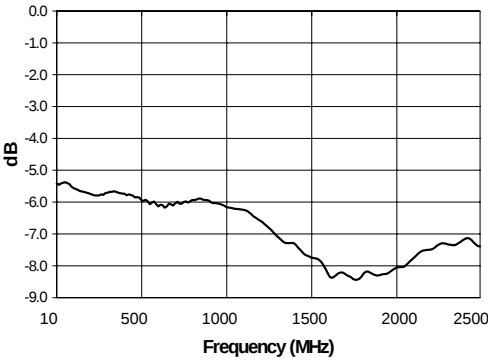
Parameter	Absolute Maximum
RF Power	150 mW
Peak IF Current	40 mA
Storage Temperature	-55°C to +100°C
Operating Temperature	-55°C to +100°C
Pin Temperature (10 Seconds)	260°C

Functional Configuration

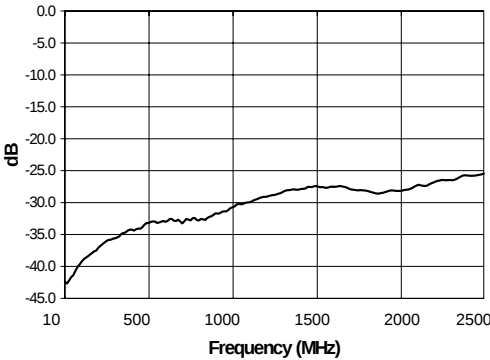
Function	Pin No.
LO	1
RF	4
IF	5
Ground	2, 3, 6
Case Ground	—
Unconnected	—

Typical Performance @ +25°C

Conversion Loss



L-R Isolation



L-X Isolation

