

**E-Series Surface Mount Mixer**  
350 – 2000 MHz

**ELCM-11F**  
V3

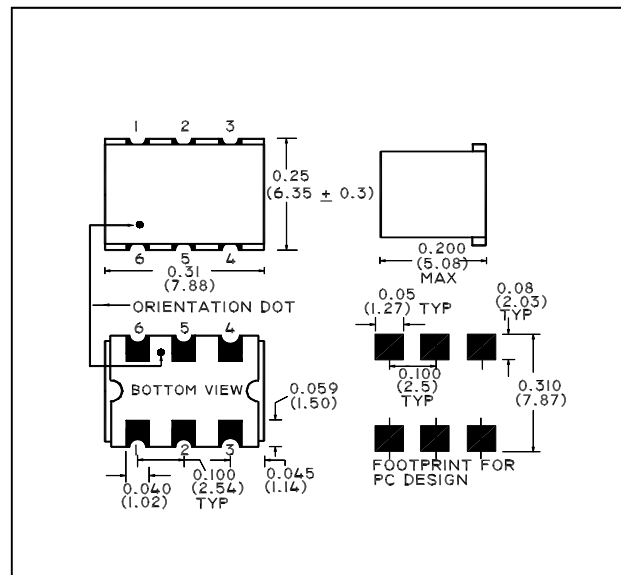
**Features**

- LO Power +7 dBm
- Up to +1 dBm RF
- Low Profile
- Surface Mount
- Tape and reel packaging available

**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. Parts are packaged in tape & reel.

**SM - 87 Package**



**Electrical Specifications:  $T_A = 25^\circ\text{C}$ ,  $Z_0 = 50\Omega$ <sup>1</sup>, LO = +7 dBm**

Parameter	Test Conditions	Frequency	Units	Min	Typ	Max
RF Frequency	—	350 - 2000	MHz	—	—	—
LO Frequency	—	350 - 2000	MHz	—	—	—
IF Frequency	—	DC - 400	MHz	—	—	—
Conversion Loss	—	350 - 1000	dB	—	5.5	7.0
		350 - 2000	dB	—	6.8	9.2
Isolation	LO to RF	350 - 750	dB	26	37	—
		750 - 1000	dB	20	36	—
		1000 - 2000	dB	20	32	—
Isolation	LO to IF	350 - 750	dB	14	22	—
		750 - 1000	dB	20	29	—
		1000 - 2000	dB	20	28	—
Input 1 dB Compression	—	0.5 - 500	dBm	—	—	1

**Ordering Information**

Part Number	Package
ELCM-11FTR	Tape and Reel (900 piece Reel)

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### Pin Configuration

Pin No.	Function
1	LO
2	Ground
3	Ground
4	RF
5	IF
6	Ground

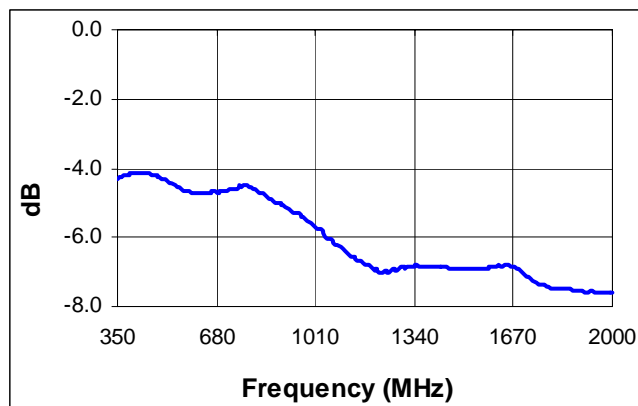
### Absolute Maximum Ratings <sup>1</sup>

Parameter	Absolute Maximum
RF Power	50 mW
Peak IF Current	40 mA
Operating Temperature	-55°C to +100°C
Storage Temperature	-55°C to +125°C
Pin Temperature (10 seconds)	+260°C

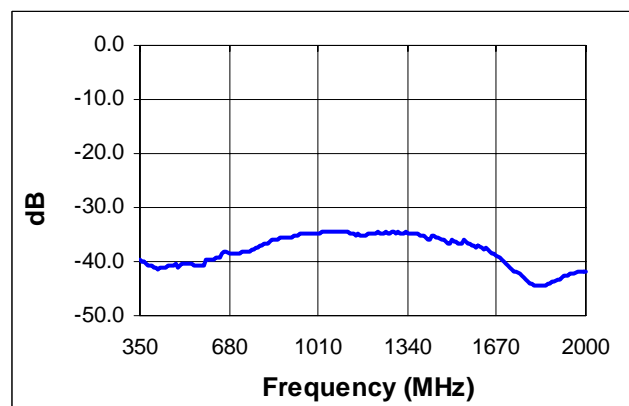
1. Operation of this device above any one of these parameters may cause permanent damage.

### Typical Performance Curves

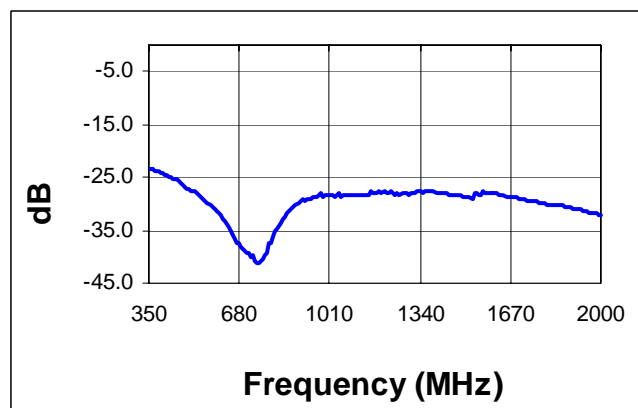
#### Conversion Loss



#### LO - RF Isolation



#### LO - IF Isolation



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