

# E-Series Surface Mount Mixer

## 1 - 3500 MHz

**ESMD-169**

V3.00

### Features

- LO Power: +10 dBm
- Up to +5 dBm RF
- Surface Mount

### Specifications @ 25°C

Frequency Range		
RF		1 - 3500 MHz
LO		1 - 3500 MHz
IF		5 - 1500 MHz
Conversion Loss (dB)		
	Typical	Maximum
5 - 1000 MHz	5.9	7.0
5 - 3000 MHz	7.1	10.0
1 - 3500 MHz	7.5	12.5
Isolation (dB)		
	Typical	Minimum
LO to RF		
5 - 1000 MHz	38	30
1 - 3500 MHz	32	15
LO to IF		
5 - 1000 MHz	38	30
1 - 3500 MHz	34	18
RF to IF		
10 - 500 MHz	30	20
1 - 3000 MHz	25	15
1 - 3500 MHz	22	15
Midband VSWR		2.0 : 1 Typical

Two Tone Third Order Input Intercept
Two Tone Intermodulation Ratio
( -10 dBm I/P, each tone & 60 MHz IF)
55 dBc @ 10 MHz
55 dBc @ 500 MHz
56 dBc @ 3000 MHz

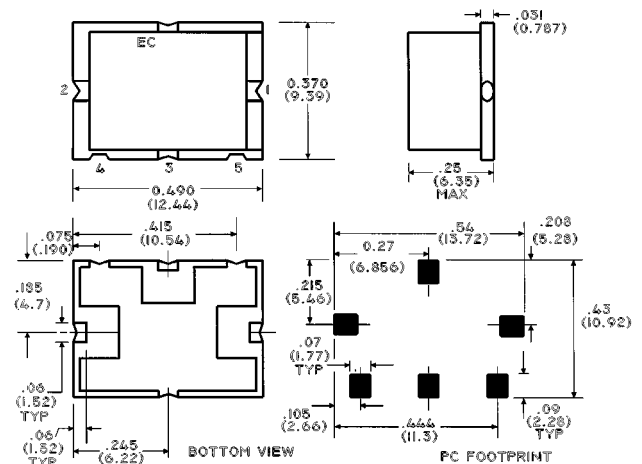
### Operating Characteristics

Impedance	50 Ohms Nominal
RF input for 1dB Compression	+ 5 dBm

### Ordering Information

<b>Part No.</b>	<b>Packaging</b>
ESMD-169	Tube
ESMD-169TR	Forward Tape & Reel

### SM-2



Dimensions in ( ) are in mm.  
Unless Otherwise Noted: .x = ±0.04 (1.00)  
.xx = ±0.02 (0.50)  
.xxx = ±0.010 (0.250)

### Pin Configuration

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

### 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

S 0802 C

Specifications Subject to Change Without Notice.

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