

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	

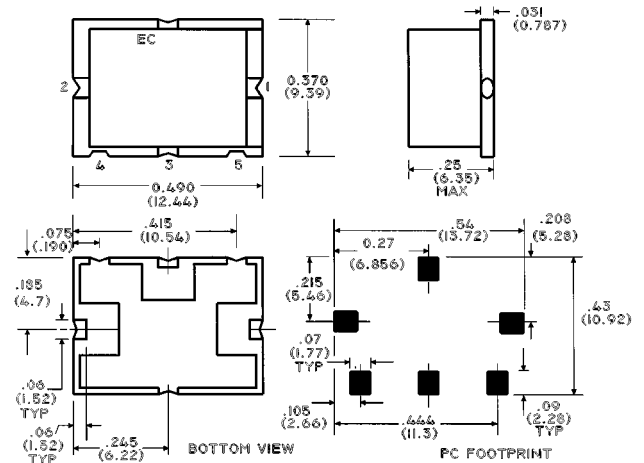
Operating Characteristics

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

Ordering Information

Part No.	Packaging
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.

M/A-COM, Inc.

North America: Tel. (800) 366-2266 ■ Asia/Pacific: Tel. +81 (03) 3226-1671 ■ Europe: Tel. +44 (1344) 869 595
Fax (800) 618-8883 Fax +81 (03) 3226-1451 Fax +44 (1344) 300 020