

# LMOC2000 Series

## Oven Controlled Crystal Oscillator

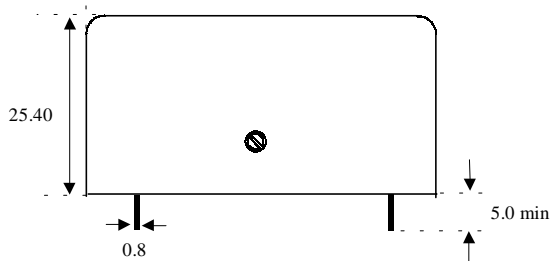
FREQUENCY CHARACTERISTICS	
Nominal Frequency	0.5 MHz to 120 MHz (HCMOS/TTL) 5 MHz to 120 MHz (Sine)
Frequency at room temperature	±0.1 PPM at 25° C ±2° C
Operating temperature stability	±5 x 10 <sup>-8</sup> and ±1 x 10 <sup>-7</sup>
Operating temperature range	-20 to 70° C and 0 to 65° C
Supply voltage stability	<1 x 10 <sup>-8</sup> per 5%
Frequency adjustment	Internal trimmer
Long term aging rate	±1 x 10 <sup>-9</sup> /day after 30 days *
<i>* for better stability please contact us.</i>	±5 x 10 <sup>-9</sup> /day after 30 days *
Warm up time	±4 x 10 <sup>-7</sup> /within 10 minutes @ 25° C

POWER SUPPLY	
Voltage	+5 V DC / +12 V DC (±5%) for HCMOS/TTL +12 V DC (±5%) for Sine
Power Consumption	for <b>+5V DC</b> 2.5 watts max. at 25° C for <b>+12V DC</b> 2.5 watts max. at 25° C

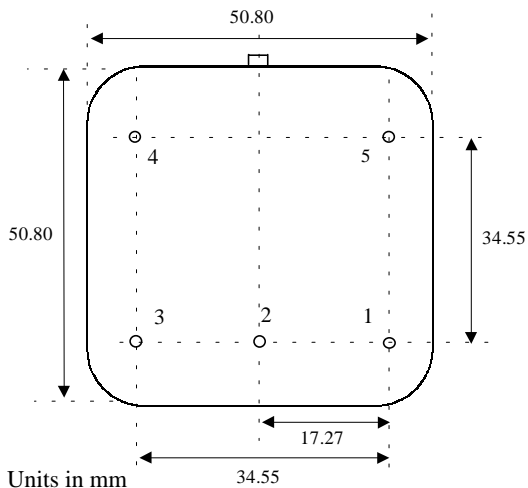
OSCILLATOR OUTPUT	CODE	
Output	HCMOS	H
	TTL	T
	Sine (+7 dBm into 50 Ohms)	S
Rise/Fall times for HCMOS/TTL	10 nS max.	
Duty cycle for HCMOS/TTL	40 to 60%	

### OUTLINE AND PIN CONFIGURATION

Side View



Bottom View



Units in mm

PHASE NOISE (10 MHz Sine Output)	
1 Hz offset	-60 dBc/Hz
10 Hz offset	-90 dBc/Hz
100 Hz offset	-120 dBc/Hz
1 KHz offset	-130 dBc/Hz
10 KHz offset	-135 dBc/Hz

#### Pin connection

- 1 : No Connection
- 2 : No Connection
- 3 : Output
- 4 : Ground
- 5 : DC Input

## General Electronic Devices

320 So. Pacific St. San Marcos, CA 92069

E-mail : [info@gedlm.com](mailto:info@gedlm.com) ♦ [www.gedlm.com](http://www.gedlm.com)

Tel: (760) 591-4170 (760) 591-4095 Fax: (760) 591-4164