

# LM1400 Series

## Full Size ECL Crystal Clock Oscillator

- ECL or PECL Output
- 14 pin DIP Compatible
- Hermetically Sealed, resistance welded for High Reliability
- Complimentary Outputs
- Optional Internal Terminations
- User Specified Frequency Stability

### ELECTRICAL SPECIFICATIONS

Frequency Range	30MHz ~ 250MHz		
Frequency Stability	±25ppm	±50ppm	±100ppm
Operating Temperature Range	0°C to 70°C or -40°C to 85°C		
Storage Temperature Range	-55 ~ +125°C		
Input Voltage	$V_{EE} = -5.2V_{DC} \pm 5\%$ $V_{CC} = +5.2V_{DC} \pm 5\%$		
Input Current	140mA Max		
Symmetry	50±20% -1.3V <sub>DC</sub> Level    50±20%+3.9V <sub>DC</sub> Level		
Rise Time / Fall Time	3nSeconds Max    20 to 80% V <sub>EE</sub>		
Output Load	50 ohms to -2V (output must be loaded)		

### PART NUMBERING GUIDE

**LM1400 E C G- 200.000MHZ**

Pin Configuration  
Per Table 1

Frequency Tolerance/Stability

Blank or A - ±100ppm  
B - ± 50ppm  
C - ± 25ppm  
X - Customer Specified

Frequency

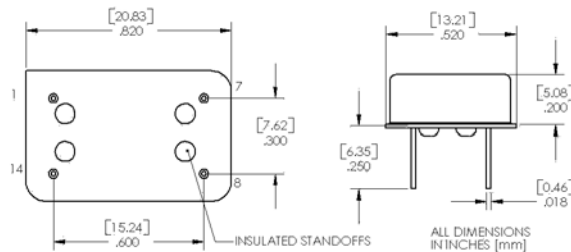
Available Option

Blank - standard  
G - Gull Wing  
J - J-Lead  
ET - Extended Temperature  
(-40 ~ +85°C)  
MT - Military Temperature

Table 1. PIN CONFIGURATIONS

PIN	A	B	C	D	E	F	G
1	NC	NC	NC	ECL Comp. Out	ECL Comp. Out	ECL Comp. Out	Case Gnd NC
7	V <sub>EE</sub> Case Gnd	V <sub>CC</sub> Case Gnd	V <sub>EE</sub>	V <sub>EE</sub>	V <sub>EE</sub> Case Gnd	V <sub>CC</sub> Case Gnd	V <sub>EE</sub>
8	ECL Output	ECL Output	ECL Output	ECL Output	ECL Output	ECL Output	ECL Output
14	V <sub>CC</sub>	V <sub>EE</sub>	V <sub>CC</sub> Case Gnd	V <sub>CC</sub> Case Gnd	V <sub>CC</sub>	V <sub>EE</sub>	V <sub>CC</sub>

### PACKAGE DIMENSIONS



## General Electronic Devices

320 So. Pacific St. San Marcos, CA 92069 Tel: (760) 591-4170 Fax: (760) 591-4164 Email: gedlm@4dcomm.com Website: www.gedlm.com