



# M200 SERIES (CMOS)

## STANDARD SPECIFICATIONS

FREQUENCY RANGE	1.5 Hz to 12 MHz
FREQUENCY ACCURACY @ + 25 °C	± 0.0015% ( ± 15 PPM )
FREQUENCY STABILITY Vs. TEMPERATURE	See Options Below
OPERATING TEMPERATURE RANGE	See Options Below

INPUT VOLTAGE ( See note below ) + 5 VDC to + 15 VDC ± 10%

INPUT CURRENT  
5 mA Max. @ + 5 VDC  
25 mA Max. @ + 15 VDC

OUTPUT CMOS  
LOAD 200 K $\Omega$  in parallel with 50 pf  
SYMMETRY 60/40% @ 50% Output Level

RISE & FALL TIMES  
( 10% to 90% Output Level )  
150 nS Max. @ + 5 VDC  
50 nS Max. @ + 15 VDC

START-UP TIME  
< 10 MHz 20 mS Max.  
≥ 10 MHz 15 mS Max.

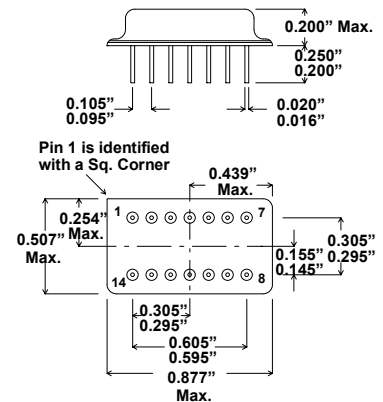
FREQUENCY STABILITY Vs. VOLTAGE ± 0.0005% ( ± 5 PPM ) Max.  
( for 10% change in Voltage )

AGING @ +25 °C ± 0.0005% ( ± 5 PPM ) / year Max.

PACKAGE, SEAL & LEAD FINISH Conforms with the Requirements of MIL-PRF-55310

**Note:** Input Voltage must be specified for 200 Series CMOS parts, minimum input voltage required depends upon output frequency and operating temperature range. Consult factory for your specific application.

**Contact Xsis Engineering** for special requirements such as, **Output Symmetry, Start-up Time, Frequency Accuracy, Complementary Outputs, Multiple Outputs, etc.**



### Pin Connections

1	OUTPUT
2	CASE
8	GND
14	B+
All Others	N/C

### ORDERING INFORMATION ( Select from options below ) :



Frequency Stability

- 1 = ± 0.1%
- 2 = ± 0.05%
- 3 = ± 0.01%
- 4 = ± 0.005%
- 5 = ± 0.002% \*

\* Option 5 not available for - 55 °C to +125 °C

Operating Temperature Range

- 1 = 0 °C to + 70 °C
- 2 = - 30 °C to + 85 °C
- 3 = - 55 °C to +125 °C

Add Suffix "883B" for Mil-Screened Option

**EXAMPLE: M243 - 883B - 4.000 MHz = 14 Pin Package with "M" Pinout, CMOS, ± 0.005% over -55 °C to +125 °C, Mil-Screened, and 20.000 MHz**