

HIGH STABILITY CLOCK OSCILLATORS IN 14 PIN DIP - XO14H Series

FEATURES

- RoHS Compliant (Pb-Free), Wide Frequency Range, Industrial and Military Temperature Available
- As Stable as ±5 ppm over 0°C to 50°C, 5 VDC or 3.3 VDC Option
- Tri-state Output Available, Industry Standard Lead Spacing
- Taller Package (8 mm Height Maximum) with Sealed Crystal Resonator Inside

SPECIFICATIONS

1 MHz to 160 MHz Frequency Range

Input Voltage (Vcc) $A = +5 \text{ VDC} \pm 5\%$; $B = +3.3 \text{ VDC} \pm 5\%$

Input Current 65 mA Maximum, depending on frequency and output load

Storage Temperature -55°C to 125°C

Temperature Range

Frequency Stability over Temp. $50 = \pm 50 \text{ ppm}$; $25 = \pm 25 \text{ ppm}$; $10 = \pm 10 \text{ ppm}$; $5 = \pm 5 \text{ ppm}$, Ref. to 25° C A = 0°C to 70°C; B = -40°C to 85°C; E = -55°C to 125°C; F = 0°C to 50°C

Electric Option (Symmetry) 0 = No tristate 60/40%; 2 = No tristate 55/45%; 4 = No tristate 52.5/47.5%

0.9Vcc Minimum / 0.1Vcc Maximum

1 = Tristate 60/40%; 3 = Tristate 55/45%; 5 = Tristate 52.5/47.5%

Output Load HCMOS/TTL, or ACMOS compatible (10 TTL gates or 50 pF MAX)

6 ns Maximum

10 ms Maximum

Logic "1" / Logic "0" Level

Rise/Fall Time (Tr/Tf) Start-up time

Phase Jitter (RMS, 1 Sigma)

Tristate Function

1 ps Max for fj > 1kHz; 0.3 ps Typical for fj = 12KHz to 20MHz Input (Pin 1) High (> 2.2V) or open: Output (Pin 8) active Input (Pin 1) Low (< 0.8V): Output disabled in high impedance

Enable Time 100 ns Maximum

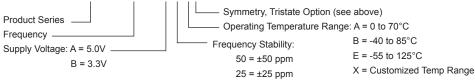
Frequency Stability over Load Frequency Stability over Vcc

±3 ppm Max. for 10% variation of load at Vcc = +5.0 VDC at 25°C

±5 ppm Max. for 5% variation at Vcc = +5.0 VDC and standard load at 25°C

 $10 = \pm 10 \text{ ppm}$

Creating a Part Number XO14H-10M000-A10F3



OUTLINE DRAWING

