HCMOS/TTL COMPATIBLE HIGH STABILITY VCXO IN 14 PIN DIP PACKAGE- VC14H Series

FEATURES

- RoHS Compliant (Pb-Free), Wide Frequency Pulling Range, 5 VDC or 3.3 VDC Option
- Very Low Phase Jitter with Fundamental Crystal Design
- Commercial or Industrial Temperature Range, Industry Standard Lead Spacing
- Sealed UM-1 Crystal Inside for High Stability: ±10 ppm / 0°C to 70°C is available

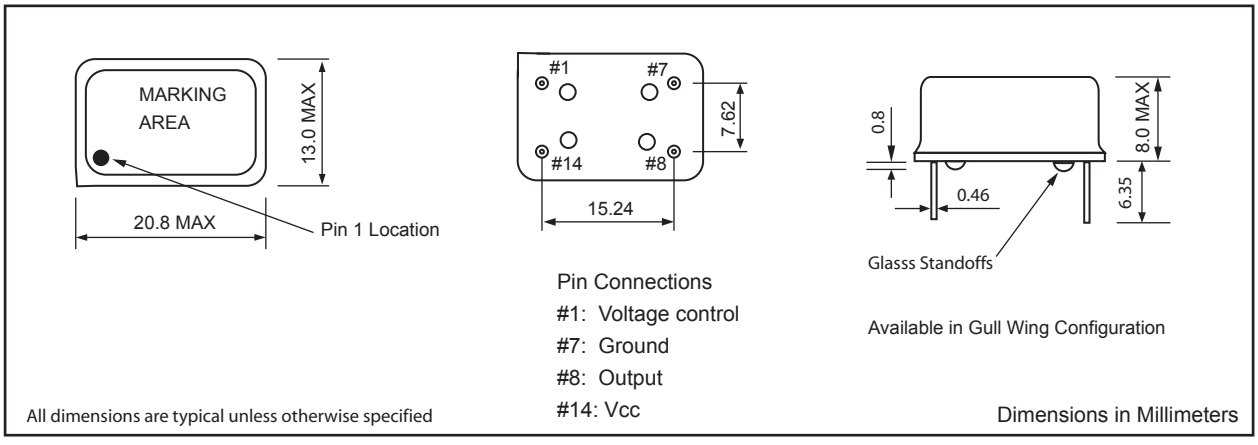
SPECIFICATIONS

Frequency Range	1 MHz to 125 MHz (Vcc = 3.3V), to 160 MHz (Vcc = 5V)
Input Voltage (Vcc)	A = +5 VDC ± 5%; B = +3.3 VDC ± 5%
Input Current (Max.)	20 mA (to 20 MHz); 40 mA (to 40 MHz); 60 mA (to 100 MHz); 80 mA (to 160 MHz)
Control Voltage (Vc)	+2.5V ± 2.0V for 5.0V part; +1.65V ± 1.5V for 3.3V part
Storage Temperature	-55°C to 125°C
Frequency Stability / APR (Min)	A = ±50 / ±50 ppm; B = ±25 / ±50 ppm; C = ±50 / ±100 ppm; F = ±10 / ±50 ppm
Temperature Range	A = 0°C to 70°C; B = -40°C to 85°C; C = -10°C to 60°C
Standard Stability / Pullability	BA = ±25 ppm / 0°C to 70°C, Absolute pull range (APR): ±50 ppm Minimum
Duty Cycle	0 = No Tristate 60/40% symmetry; 2 = No Tristate 55/45% symmetry 4 = No Tristate 52.5/47.5% symmetry
Output Load	HCMOS: drive up to 15 pF load; TTL: drive up to 10 TTL gates
Logic "1" / Logic "0" Level	0.9Vcc Minimum / 0.1Vcc Maximum
Rise/Fall Time (Tr/Tf)	10 ns Maximum at 20% to 80% Vp-p
Start-up time	10 ms Maximum
Phase Jitter (RMS, 1 Sigma)	1 ps Maximum for fj > 1kHz; 0.3 ps Typical for fj = 12KHz to 20MHz
Modulation Bandwidth	10 kHz Minimum at -3 dB
Linearity / Slope	±10% Maximum of best straight line fit / Positive
Input Impedance	10 kOhms Minimum
Setability at Fnom, 25°C	+2.5V ±0.5V for 5.0V part; +1.65V ±0.4V for 3.3V part

Creating a Part Number **VC14H-44M736-A F C 2**

- Product Series
- Frequency
- Supply Voltage: A = 5.0V, B = 3.3V
- Frequency Stability / APR (Min): A = ±50 / ±50 ppm, B = ±25 / ±50 ppm, C = ±50 / ±100 ppm, F = ±10 / ±50 ppm
- Operating Temperature Range: A = 0 to 70°C, B = -40 to 85°C, C = -10 to 60°C, X = Customized Temp Range
- Duty Cycle (see above)

OUTLINE DRAWING



Pin Connections
#1: Voltage control
#7: Ground
#8: Output
#14: Vcc

Available in Gull Wing Configuration

All dimensions are typical unless otherwise specified

Dimensions in Millimeters