Voltage Controlled Crystal Oscillators SUNSTAR微波光电 http://www.rfoe.net/ TEL:0755-83396822 FAX:0755-83376182 E-MAIL: szss20@163.com

## SINEWAVE OUTPUT HIGH STABILITY VCXO IN 14 PIN DIP PACKAGE- VC14S Series

## **FEATURES**

- RoHS Compliant (Pb-Free), Wide Frequency Pulling Range (±150 ppm, etc.)
- Very Low Phase Jitter with Fundamental or 3rd O/T Crystal Design
- 5 VDC or 3.3 VDC Option, Industry Standard Lead Spacing
- Sealed UM-1 Crystal Inside for High Stability: ±10 ppm / 0°C to 70°C is available

## **SPECIFICATIONS**

6 MHz to 190 MHz Frequency Range

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

Input Current (Max.) 20 mA (to 25 MHz); 30 mA (to 50 MHz); 60 mA (to 125 MHz); 70 mA (to 190 MHz)

Control Voltage (Vc)  $+2.5V \pm 2.0V$  for 5.0V part;  $+1.65V \pm 1.5V$  for 3.3V part

**Storage Temperature** -55°C to 125°C

Frequency Stability / APR (Min)

Temperature Range

Standard Stability / Pullability

Aging

 $A = \pm 50 / \pm 50 \text{ ppm}$ ;  $B = \pm 25 / \pm 50 \text{ ppm}$ ;  $C = \pm 50 / \pm 100 \text{ ppm}$ ;  $F = \pm 10 / \pm 50 \text{ ppm}$ 

 $A = 0^{\circ}C$  to  $70^{\circ}C$ ;  $B = -40^{\circ}C$  to  $85^{\circ}C$ ;  $C = -10^{\circ}C$  to  $60^{\circ}C$ 

BA =  $\pm 25$  ppm / 0°C to 70°C, Absolute pull range (APR):  $\pm 50$  ppm Minimum

±3 ppm Max per year

**Output Load** 50 Ohms **Output Waveform** Sine wave

**Output Level** 0 dBm Typ for 3.3V part; 10 dBm Typ for 5.0V part

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

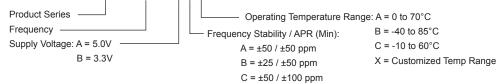
**Modulation Bandwidth** 10 kHz Minimum at -3 dB

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





 $F = \pm 10 / \pm 50 \text{ ppm}$ 

## **OUTLINE DRAWING**

