



## HCMOS/TTL COMPATIBLE TRI-STATE VCXO IN 14 PIN DIP PACKAGE- VC14T Series

### FEATURES

- Wide Frequency Pulling Range, 5 VDC or 3.3 VDC Option
- Very Low Phase Jitter with Fundamental Crystal Design
- Commercial or Industrial Temperature Range
- Hermetically Sealed 14-pin DIP Package with Industry Standard Lead Spacing

### SPECIFICATIONS

Frequency Range	<input type="checkbox"/>	<input type="checkbox"/>	1 MHz to 39 MHz
Input Voltage (Vcc)	<input type="checkbox"/>	<input type="checkbox"/>	A = +5 VDC $\pm$ 5%; B = +3.3 VDC $\pm$ 5%
Input Current	<input type="checkbox"/>	<input type="checkbox"/>	40 mA Maximum, depending on frequency and output load
Control Voltage (Vc)	<input type="checkbox"/>	<input type="checkbox"/>	+2.5V $\pm$ 2.0V for 5.0V part; +1.65V $\pm$ 1.5V for 3.3V part
Storage Temperature	<input type="checkbox"/>	<input type="checkbox"/>	-55°C to 125°C
Frequency Stability / APR (Min)	<input type="checkbox"/>	<input type="checkbox"/>	A = $\pm$ 50 / $\pm$ 50 ppm; B = $\pm$ 25 / $\pm$ 50 ppm; C = $\pm$ 50 / $\pm$ 100 ppm
Temperature Range	<input type="checkbox"/>	<input type="checkbox"/>	A = 0°C to 70°C; B = -40°C to 85°C; C = -10°C to 60°C
Standard Stability / Pullability	<input type="checkbox"/>	<input type="checkbox"/>	AA = $\pm$ 50 ppm / 0°C to 70°C, Absolute pull range (APR): $\pm$ 50 ppm Minimum
Duty Cycle	<input type="checkbox"/>	<input type="checkbox"/>	1 = Tristate 60/40% symmetry; 3 = Tristate 55/45% symmetry
Output Load	<input type="checkbox"/>	<input type="checkbox"/>	HCMOS: drive up to 15 pF load; TTL: drive up to 10 TTL gates
Logic "1" / Logic "0" Level	<input type="checkbox"/>	<input type="checkbox"/>	0.9Vcc Minimum / 0.1Vcc Maximum
Rise/Fall Time (Tr/Tf)	<input type="checkbox"/>	<input type="checkbox"/>	10 ns Maximum at 20% to 80% Vp-p
Start-up time	<input type="checkbox"/>	<input type="checkbox"/>	10 ms Maximum
Phase Jitter	<input type="checkbox"/>	<input type="checkbox"/>	1 ps Maximum at 1Sigma for $f_j > 1$ kHz
Modulation Bandwidth	<input type="checkbox"/>	<input type="checkbox"/>	10 kHz Minimum at -3 dB
Linearity / Slope	<input type="checkbox"/>	<input type="checkbox"/>	$\pm$ 10% Maximum of best straight line fit / Positive
Input Impedance	<input type="checkbox"/>	<input type="checkbox"/>	10 kOhms Minimum
Setability at Fnom, 25°C	<input type="checkbox"/>	<input type="checkbox"/>	+2.5V $\pm$ 0.5V for 5.0V part; +1.65V $\pm$ 0.4V for 3.3V part
Tristate Function	<input type="checkbox"/>	<input type="checkbox"/>	Input (Pin 3) High (> 2.5V) or open: Output (Pin 8) active
	<input type="checkbox"/>	<input type="checkbox"/>	Input (Pin 3) Low (< 0.5V): Output disabled in high impedance
Enable/Disable Time	<input type="checkbox"/>	<input type="checkbox"/>	100 ns Maximum
Typical Part Number	<input type="checkbox"/>	<input type="checkbox"/>	VC14T-Frequency-Vcc-Freq. Stability/Pullability-Temperature Range-Duty cycle
P/N Example	<input type="checkbox"/>	<input type="checkbox"/>	VC14T-27M000-BAA3: HCMOS/TTL compatible tristate VCXO in 20.8x13x5 mm
	<input type="checkbox"/>	<input type="checkbox"/>	14-pin DIP metal package, 27 MHz, +3.3 VDC, $\pm$ 50 ppm / 0°C to 70°C,
	<input type="checkbox"/>	<input type="checkbox"/>	APR: $\pm$ 50 ppm Minimum, Duty cycle: 55/45

### OUTLINE DRAWING

