

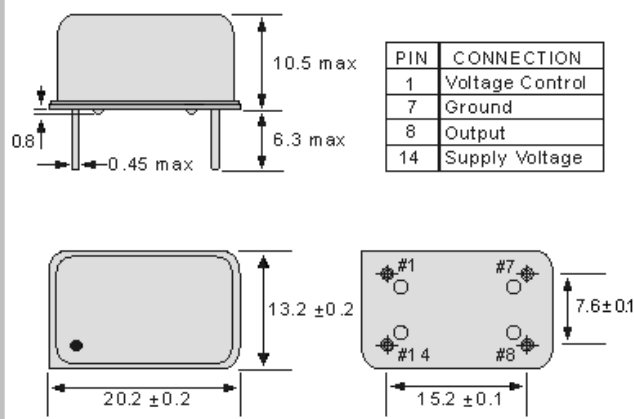
## OCXO-14T



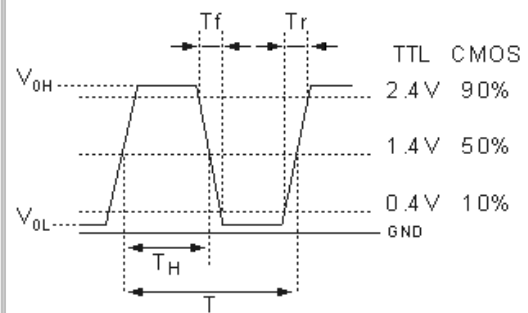
OCXO-14T3.3 3.3V  
Oven Controlled Crystal Oscillator

- DIL in metal case (20.2 x 13.2 x 10.5) mm
- CMOS Square Wave, AT-cut crystal
- Voltage control (Electronic Freq. Tuning) is standard
- Best Stability  $\pm 0.01$  ppm
- RoHS conform; Lead-free product
- Vibration: 10 to 2000 Hz / 10 G
- Shock: 2000 G, 0.3ms 1/2 sine
- Available in many standard and special frequencies

### External Dimensions



### CMOS Output Wave Form



## Specifications

Holder Type:	OCXO-14T3.3 3.3V (Voltage code is " 3.3 ")
Supply Voltage range:	+ 3.3V $\pm 0.15$ V
Frequency Range:	1.250 MHz to 100.000 MHz
Initial Calibration Tolerance:	$\pm 0.5$ ppm (max.), Vcon = + 1.65V
Frequency Stability (FS):	
(FS) Operating Temperature Range:	0°C to + 60°C, typical $\pm 0.2$ (ppm), available $\pm 0.075$ (ppm) -20°C to + 70°C, typical $\pm 0.3$ (ppm), available $\pm 0.150$ (ppm) -40°C to + 85°C, typical $\pm 0.5$ (ppm), available $\pm 0.250$ (ppm)
(FS) Voltage Change:	( $\pm 0.15$ V) $< \pm 0.1$ ppm
(FS) Warm up time (+ 25°C):	5 minutes (max.)
(FS) Aging:	$\pm 0.7$ ppm first year, $< 4.0$ ppm over 10 years
(FS) Load Change:	$\pm 0.01$ ppm, for $\pm 5\%$ load condition change
Voltage Control on pin 1 (EFC):	Electronic Frequency Tuning
(EFC) Freq. Deviation Range:	$\pm 4.0$ ppm (min.), Reference to fo at + 25°C
(EFC) Control Voltage Range:	(+ 3.3V) 0.0 to 3.3V
(EFC) Transfer Function:	Positive: Increasing control voltage increases output frequency
(EFC) Input Impedance:	47 k Ohm (min.)
(EFC) Linearity:	$\pm 10\%$ (max.)
Power Dissipation (at 25°C):	steady-state : 1.5 W (max.) , turn-on: 2.5W (max.)
Output:	Load (Fan out) : 10LS or 47pF Output Logic: High (Voh) + 2.8V (min), Low (Vol) + 0.4V (max.) Duty Cycle (at 50% Vcc) : 50% $\pm 10\%$ Rise and Fall Time (20% to 80%) : 7ns (max.) (20% to 80% of waveform)
Output Phase Noise (10.0 MHz):	-80dBc/Hz @ 1Hz, -110dBc/Hz @ 10Hz, -135dBc/Hz @ 100Hz, -145dBc/Hz @ 1kHz, -150dBc/Hz @ 10kHz

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