

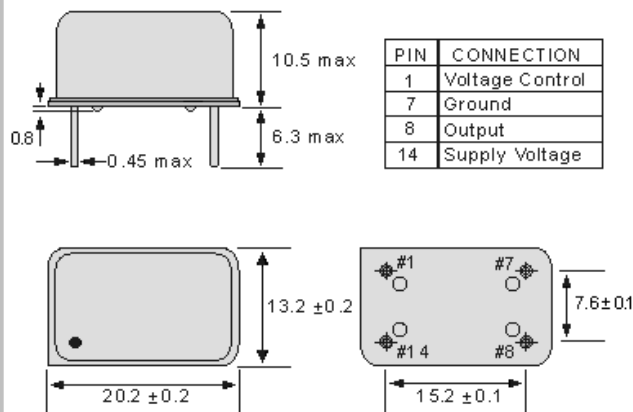
## OCXO-14T



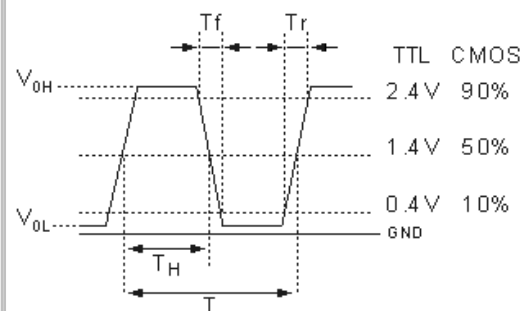
OCXO-14T3.3 3.3V  
Oven Controlled Crystal Oscillator

- 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
- 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 $\pm$ 0.15V
Frequency:	20.000000 MHz
Initial Calibration Tolerance:	$\pm$ 0.5ppm (max.), $V_{con} = +1.65V$
Frequency Stability (FS):	
(FS) Operating Temperature Range:	+2°C to +35°C, $\pm$ 0.1ppm
(FS) Voltage Change:	( $\pm$ 0.15V) < $\pm$ 0.1ppm
(FS) Warm up time (+25°C):	5 minutes (max.)
(FS) Aging:	$\pm$ 0.7 ppm first year, < 4.0ppm over 10 years
(FS) Load Change:	$\pm$ 0.01ppm, for $\pm$ 5% load condition change
Voltage Control on pin 1 (EFC):	Electronic Frequency Tuning
(EFC) Freq. Deviation Range:	$\pm$ 4.0ppm (min.), Reference to $f_0$ 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 ( $V_{oh}$ ) + 2.8V (min), Low ( $V_{ol}$ ) + 0.4V (max.) Duty Cycle (at 50% $V_{cc}$ ) : 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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