

CLOCK OSCILLATORS**T500/ T1000 Clock Oscillator,
Standard Welded Thru-Hole Package**

RoHS Complaint Optional

Features:

- ◆ High frequency capability
- ◆ Hermetically sealed welded package
- ◆ 8 pin and 14 pin DIP versions
- ◆ Tight symmetry available
- ◆ HCMOS/ TTL compatible
- ◆ Case ground minimizes EMI

Model: T500/ T1000 Series Specification

Parameter	Symbol	Unit	Min.		Typ.		Max.	
			5.0V	3.3V	5.0V	3.3V	5.0V	3.3V
Center Frequency	f_0	MHz	1.00	1.00			200.00	200.00
Operating Temperature Range	T	°C	-20 to +70, -30 to +80, -40 to +85					
Frequency Stability (1)		ppm	±25, 50, 100					
Supply Voltage	V_{DD}	VDC	4.5	3.0	5.0	3.3	5.5	3.6
Supply Current	I_{DD}							
1MHz to 20MHz		mA	15	10			25	17
20MHz to 40MHz		mA	40	30			40	25
40MHz to 80MHz		mA	50	40			60	35
80MHz to 125MHz		mA	50	40			70	45
(2) 125MHz to 200MHz		mA	60	50			80	65
Load			10TTL/ 50TTL: 15pF/50pF CMOS					
Output Levels								
Output High (TTL)	V_{OH}	V	2.4					
Output High (CMOS)	V_{OH}	V	90%					
Output Low (TTL)	V_{OL}	V	0.4					
Output Low (CMOS)	V_{OL}	V	10%					
Transition Times	T_R / T_F							
1MHz to 20MHz		ns	10					
20MHz to 70MHz		ns	6					
70MHz to 125MHz		ns	4					
125MHz to 200MHz		ns	2					
Output Logic	SYM	%	50 ±10% standard; 50 ±5% optional					
Aging		ppm	±5.0ppm/ per year					
Startup Time		ms	10 ms max.					
Storage Temperature		°C	-55 to +125					
Tri-State								
Output Active	Tri-State	V	4.0	2.0				
Output in High Impedance State	Tri-State	V					0.8	0.5

(1) Inclusive of calibration @ 25°C, operating temperature, Input voltage change, load change, shock, and vibration. Tighter stabilities available- contact Factory.

(2) 50pF Drive available- contact Factory.

CLOCK OSCILLATOR: T500 / 1000 Series Thru-Hole

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See Next Page for Package Information

Tellurian® Technologies, Inc.

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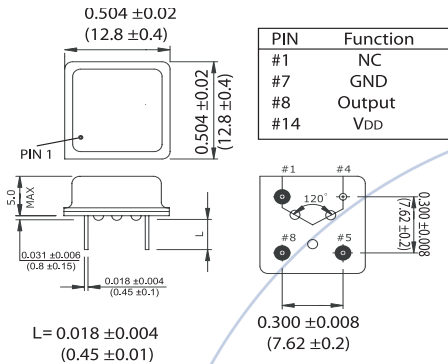
• Email: info@telluriantech.com • www.telluriantech.com

CLOCK OSCILLATORS

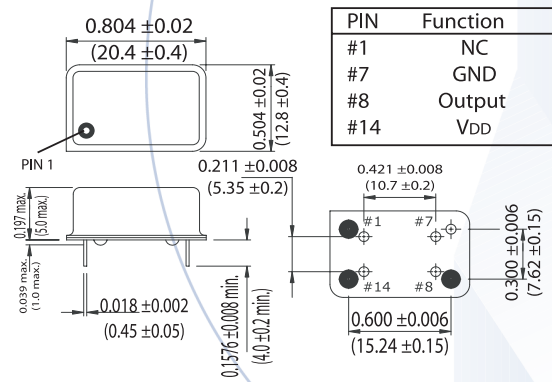
CLOCK OSCILLATOR: T500 / 1000 Series Thru-Hole

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T500 Package



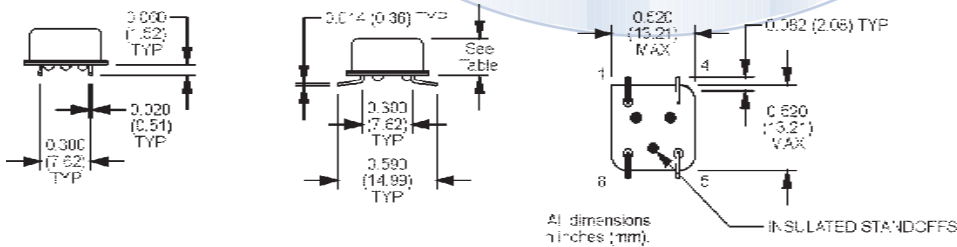
T1000 Package



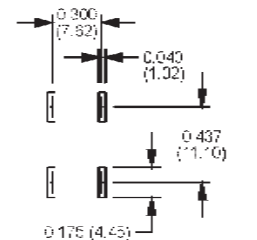
T500/T1000 Standard Clock Oscillators

8.000000	19.200000	29.491200*	47.197000
9.830400	19.440000	30.000000*	48.000000
10.000000	19.654000	31.307600	49.152000
12.000000	19.660800	32.000000*	49.867000
12.288000	19.752900	32.768000*	50.000000
12.352000	19.774000	33.000000*	51.840000
12.500000	20.000000	35.500000	52.416000
13.000000	20.480000	35.984000	52.560000
13.107200	20.950000	36.000000*	55.289000
13.070000	21.000000	36.864000	56.448000
14.285000	21.504000	36.923000	57.600000
14.318180	22.000000	37.056000	60.000000
14.745600	22.500000	38.880000	60.480000
15.360000	23.000000	40.000000	64.000000
16.000000	24.431316	41.931250	65.520000
16.384000	25.000000*	44.000000	65.536000
16.500000	26.000000	44.137900	66.000000
16.660000	27.000000*	44.539000	66.667000
17.734475	28.000000*	44.732000	68.736000
17.992200	28.224000	44.736000	72.000000
18.000000	28.800000	45.158400	73.728000
18.432000	29.491000	45.818000	75.000000

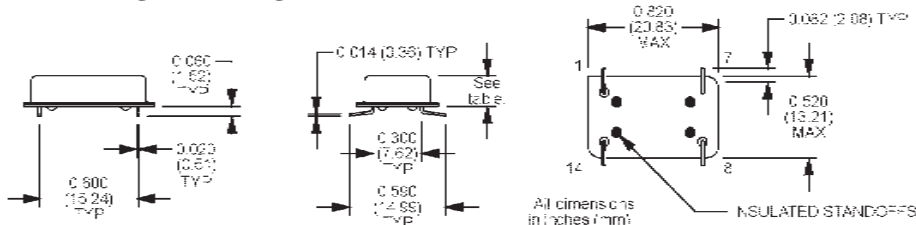
T500 Package Gullwing



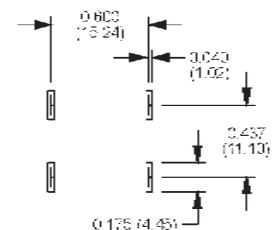
SUGGESTED SOLDER PAD LAYOUT



T1000 Package Gullwing



SUGGESTED SOLDER PAD LAYOUT



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