



V500

RoHS Complaint Optional

VCXOs

V500 / V1000 Voltage Controlled Crystal Oscillator



V1000

Features:

- ◆ High frequencies available
- ◆ Hermetically Sealed
- ◆ Wide deviation available
- ◆ SMD (Gullwing)
- ◆ Tight symmetry available
- ◆ Case ground minimizes EMI

Model: V500-V1000 Specifications

Parameter	Symbol	Unit	Min.		Typ.		Max.	
			5V	3.3V	5V	3.3V	5V	3.3V
Frequency Range	f_o	MHz	1		—		160	135
Operating Temperature Range		°C	-20 -40		— —		70	85
Storage Temperature		°C	-55		—		125	
Frequency Stability (Note: 1)		ppm	—		—		±25 or ±50 (Note: 2)	
Supply Voltage	V_{DD}	VDC	4.5	2.97	5.0	3.3	5.5	3.63
Supply Current								
1MHz to 20 MHz		mA			18	—	30	—
20 to 100 MHz	I_{DD}	mA			30	20	40	30
100 to 160MHz		mA			40	30	60	40
Output Level (CMOS)								
Output High	V_{OH}	V	4.5	2.97				
Output Low	V_{OL}	V					0.5	0.33
Transition Times (Note: 3)								
Rise/Fall Time 1.5 to 20 MHz		ns					8	
Rise/Fall Time 20 to 100 MHz	T_R/T_F	ns					5	
Rise/Fall Time 100 to 135 MHz		ns					3	
Output Symmetry	SYM	%	40		49/51		60	
Fanout			10TTL/15 pF (Note: 4)					
Deviation (Positive Slope)		ppm	±50 to ±20 min. (Note: 5)					
Control Voltage		V	0.5		4.5			
Linearity		%	±10					
Modulation Bandwidth		kHz	20					

Note 1: Inclusive of calibration at 25°C, operating temperature range, input voltage variation, load variation, aging, shock, vibration. (-40 to +85, ±25ppm version exclusive of aging.)

Note 2: Dependant upon Operation Temperature Range- Contact Factory.

Note 3: Transition times are measured between 10% and 90% of V_{DD} , with an output load of 15pF.

Note 4: 50pF Available

Note 5: Contact Factory

VCXO: V500/V1000 Series VCXO

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See Next Page for Drawing

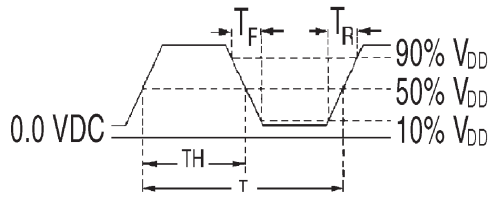
Tellurian® Technologies, Inc.

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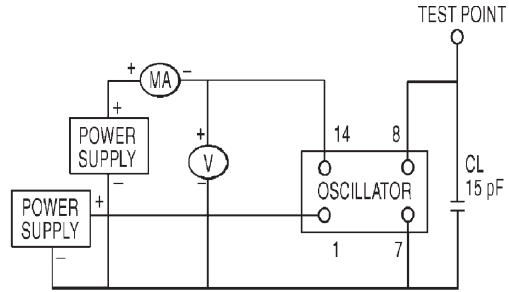
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VCXOs

Test Circuits

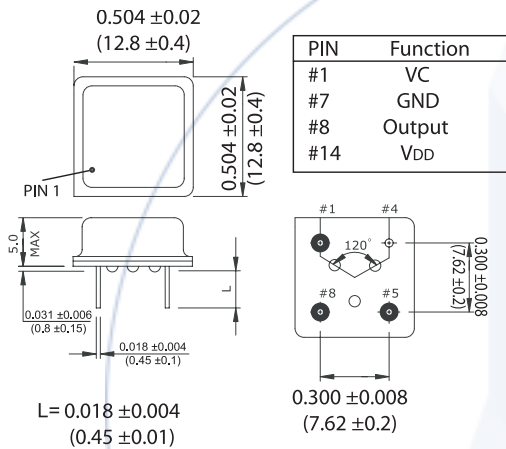


CMOS OUTPUT WAVEFORM

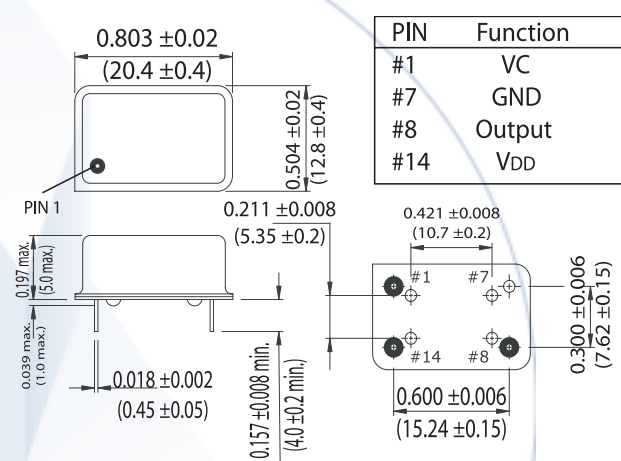


CMOS TEST CIRCUIT

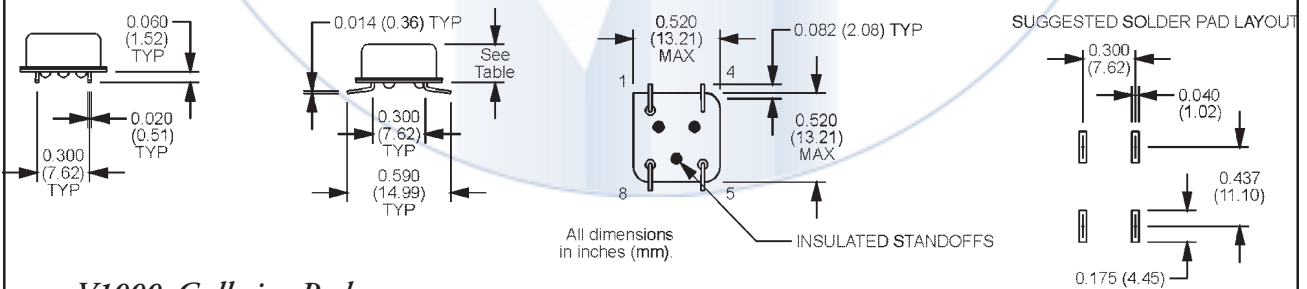
V500 Package



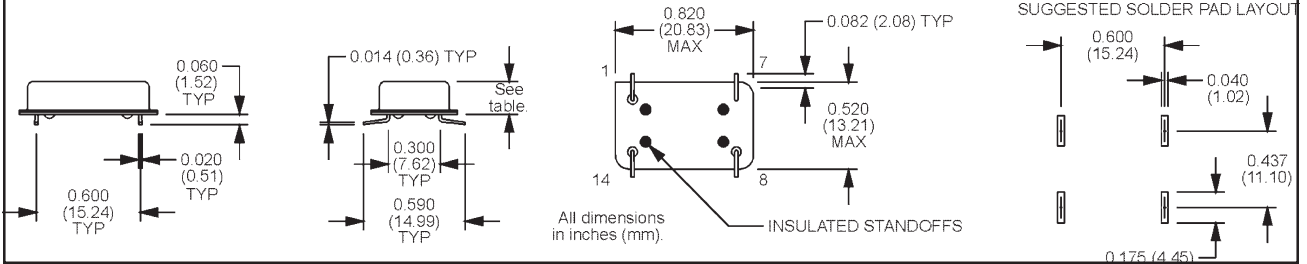
V1000 Package



V500 Gullwing Package



V1000 Gullwing Package



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