

## **GPS-TCXO Series GPS Synchronized TCXO Module**

March 2014

### **PRELIMINARY**



- The Pletronics GPS-TCXO Series is a high precision GPS-disciplined reference oscillator.
- The GPS-TCXO utilizes a high precision TCXO oscillator, synchronized to the GPS atomic clock.
- The GPS-TCXO offers unmatched price and performance over traditional GPS-OCXO reference solutions.
- Allan Deviation < 2x10<sup>-11</sup> at 25 °C.
- The GPS-TCXO has a standard LVCMOS output.

- Power is 3.3v.
- The GPS-TCXO has very low power consumption due to its high performance TCXO.
- An ideal solution for low power applications.
- Very low phase noise.
- Available in 10 MHz standard reference oscillator frequency. Contact Pletronics for additional frequencies.
- Evaluation modules are available.

TYP. ELECTRICAL SPCIFICATIONS:				
Module Specification:				
1 PPS Accuracy	±75ns to UTS RMS (1-Sigma) GPS Locked			
1 PPS Output	3.3VDC CMOS			
Serial Control	GPS NMEA Output			
GPS Frequency	L1, C/A 1574MHz			
GPS Antenna	Active or Passive			
GPS Receiver	50 Channels, Mobile, SBAS WAAS, EGNOS, MSAS capable			
Sensitivity	Acquisition –142 dBm, Tracking –158 dBm			
GPS TTFF	Cold Start—<45 sec, Warm Start—1 sec, Hot Start—1 sec			
ADEV	10Ks < 5E-012 (TCXO, GPS Locked, 25 ° C, no motion)			
TTL Alarm Output	GPS LOCK indicator, GPS Lock output			
Warm Up Time / Stabilization Time	< 3 min at + 25° C to 1E-08 Accuracy			
Supply Voltage (Vdd)	3.3V Single-Supply only (5V internally generated and filtered)			
Power Consumption	< 0.6W with TCXO			
Operating Temperature	0°C to +60°C			
Storage Temperature	-45℃ to +85℃			
Additional Features	External 1PPS input, status LEDs, full NMEA			
Oscillator Specification (TCXO):				
Frequency Output	10MHz CMOS 3.3Vpp (5.0Vpp optional)			
10MHz Retrace	±2E-08 After 1 Hour @ +25℃			
Frequency Stability Over Temperature (Unlock Condition)	±7.5E-08 (TCXO)			
Output Amplitutde	3.3Vpp CMOS, (5.0Vpp optional)			
Connections:	Connector Type:			
1PPS Output, 10MHz Output, power, system status, NMEA, 1PPS in, antenna input	100 mil spacing on pins, can be soldered, or plugged into a socket, gold-plated pins			

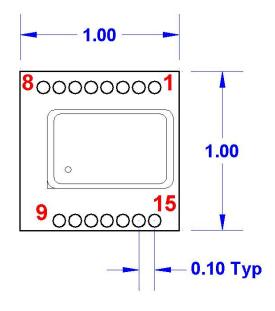


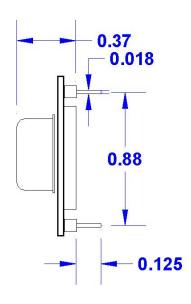
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Pad	Function	Note
1	Ground	
2	10 MHz Out	10 MHz CMOS Output
3	Lock OK	3.3V CMOS Output
4	1 PPS Output	3.3V CMOS Output
5	1 PPS Input	3.3V to 5.0V CMOS (Rising Edge)
6	+ 5V Output	< 100 ma
7	Ground	
8	+3.3V VDO In	
9	Ground	
10	Antenna Input	Module provides +5.0V Power Supply for Active Antenna
11	Ground	
12	NMEA Transmit	NEMA-0183 GGA format GPS data output
13	1PPS Input	High—External PPS, Low Internal PPS
14	N/C	No external Connection Allowed
15	N/C	No external Connection Allowed





Note: All dimensions are in inches



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С конца 2013 года компания активно расширяет линейку поставок компонентов по направлению коаксиальный кабель, кварцевые генераторы и конденсаторы (керамические, пленочные, электролитические), за счёт заключения дистрибьюторских договоров

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- Конкурентоспособные цены и скидки постоянным клиентам.
- Специальные условия для постоянных клиентов.
- Подбор аналогов.
- Поставку компонентов в любых объемах, удовлетворяющих вашим потребностям.
- Приемлемые сроки поставки, возможна ускоренная поставка.
- Доставку товара в любую точку России и стран СНГ.
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- Работу по проектам и поставку образцов.
- Формирование склада под заказчика.
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- Наличие сертификата ISO.

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Конструкторский отдел помогает осуществить:

- Регистрацию проекта у производителя компонентов.
- Техническую поддержку проекта.
- Защиту от снятия компонента с производства.
- Оценку стоимости проекта по компонентам.
- Изготовление тестовой платы монтаж и пусконаладочные работы.



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