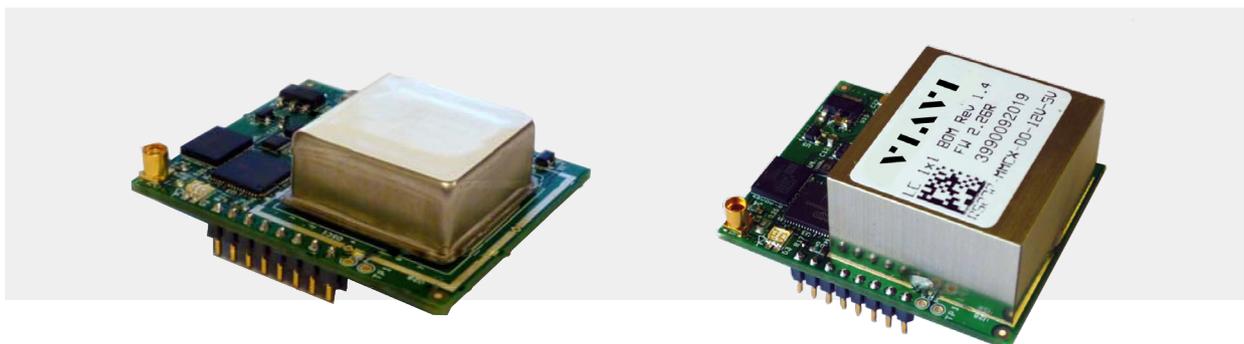


LC 1x1

Low Cost GPSDO Single Oven Oscillator

Typical Electrical Specifications

Module Specifications	
1 PPS Accuracy	LVDS level, ± 35 ns to UTC RMS (1-Sigma) GPS Locked
Holdover Stability	$< \pm 15 \mu\text{s}$ over 24 hours @ $+25.0^\circ\text{C}$ (No Motion or Airflow, 5+ days with GPS)
Serial Control	RS-232 level GPS NMEA output and SCPI control
GPS Frequency	L1, C/A 1574 MHz
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 (GPS Locked, 25°C , no motion)	
1K s	<1E-010
10K s	<8E-012



Typical Electrical Specifications (continued)

TTL Alarm Output	GPS LOCK and Event indicator
Warm Up Time/Stabilization Time	<9 min at +25°C to 5E-09 Accuracy no airflow
Supply Voltage (Vdd)	12 V ±5%, <0.21 A steady state
Power Consumption	<2.4 W steady state, <8 W warmup
Temperature	
Operating Temperature	-40°C to +85°C
Storage Temperature	-45°C to +85°C
Output Signal Levels	10 MHz LVDS, 1 PPS LVDS, CMOS option

Oscillator Specification

Frequency Output	10 MHz CMOS/LVDS	
10 MHz Retrace	±2E-08 After 1 hour @ +25°C (no GPS)	
Frequency Stability over Temperature, and over 24 hours	<±5E-09 (no GPS), <1E-012 over 24 hours (with GPS, no airflow)	
Output Amplitude	LVDS, or CMOS option	
OCXO Warm Up Time	<3 min @ +25°C	
Phase Noise	1 Hz	-90 dBc/Hz
	10 Hz	-120 dBc/Hz
	100 Hz	-140 dBc/Hz
	1 kHz	-150 dBc/Hz
	10 kHz	-155 dBc/Hz
	100 kHz	<-155 dBc/Hz

NOTE: Specifications subject to change without notice.



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