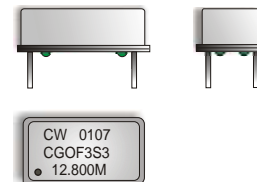


**CRYSTAL CONTROLLED OSCILLATORS**

**14 PIN DIP 3.3V HCMOS STRATUM 3 OCXO**



**CGOF3S3**

**ABSOLUTE MAXIMUM RATINGS**

TABLE 1.0

PARAMETER	UNITS	MINIMUM	NOMINAL	MAXIMUM	UNITS	NOTE
Storage Temperature		-40	-	85	°C	
Supply Voltage	(Vcc)	-0.5	-	4.5	Vdc	

**OPERATING SPECIFICATIONS**

TABLE 2.0

PARAMETER		MINIMUM	NOMINAL	MAXIMUM	UNITS	NOTE
Center Frequency	(Fo)		1.544 12.800		MHz	
Frequency Calibration		-1.5		1.5	ppm	1
Frequency Stability		-0.25	-	0.25	ppm	2
Total Frequency Tolerance		-4.6	-	4.6	ppm	3
Operating Temperature Range		0	-	70	°C	
Supply Voltage	(Vcc)	3.135	3.3	3.465	Vdc	
Supply Current	(Icc)	-	-	450	mA	
Supply Current Steady State @25°C	(Icc)	-	170	-	mA	
Jitter (BW=10Hz to 20MHz)		-	-	5	ps rms	
SSB Phase Noise at 10Hz offset		-	-90	-	dBc/Hz	
SSB Phase Noise at 10KHz offset		-	-130	-	dBc/Hz	
Start Up Time: Oscillator		-	-	10	mS	
Warm Up Time		-	-	5	Minutes	4
TDEV @ 1.0 Sec.		-	-	1	nS	
TDEV @ 4.0 Sec.		-	-	2	nS	

**HCMOS OUTPUT CHARACTERISTICS**

TABLE 3.0

PARAMETER		MINIMUM	NOMINAL	MAXIMUM	UNITS	NOTE
LOAD		-	-	15	pf	
Voltage (High)	(Voh)	2.6	-	-	Vdc	
(Low)	(Vol)	-	-	0.4	Vdc	
Current (High)	(Ioh)	-4	-	-	mA	
(Low)	(Iol)	-	-	4	mA	
Duty Cycle at 50% of Vcc		45	50	55	%	
Rise / Fall Time 10% to 90%		-	-	6	nS	

**PACKAGE CHARACTERISTICS**

TABLE 4.0

Package	14 pin DIP, hermetically sealed, grounded case, welded package
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**Notes:**

- 1) Initial calibration @ 25°C
- 2) Frequency vs. temperature stability
- 3) Inclusive of calibration, operating temperature range, supply voltage change, load change, shock and vibration, 10 years aging.
- 4) Measured @ 25°C, within 5 minutes, the unit will be within +/-0.1ppm of its reference frequency, measured after 30 minutes of continuous operation at a stable 25°C

**DESCRIPTION**

The Connor-Winfield CGOF3S3 is a low profile, hermetically sealed, 14 Pin DIP, 3.3V Oven Controlled Crystal Oscillator (OCXO) HCMOS/TTL Compatible. The CGOF3S3 is designed for Stratum 3 applications requiring low jitter and tight stability.

**FEATURES**

- 3.3V OPERATION
- LOW JITTER <5pS RMS
- TEMPERATURE STABILITY ±0.25ppm
- FREQUENCY TOLERANCE OF ±4.6ppm OVER TEN YEARS

**ORDERING INFORMATION**

**CGOF3S3 - 12.800MHz**

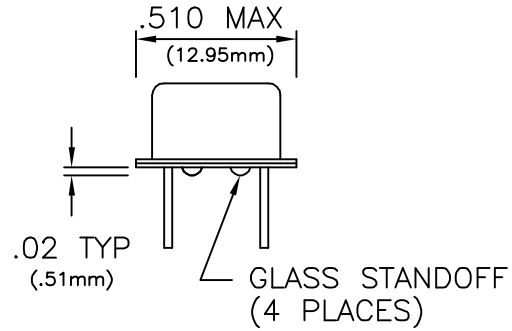
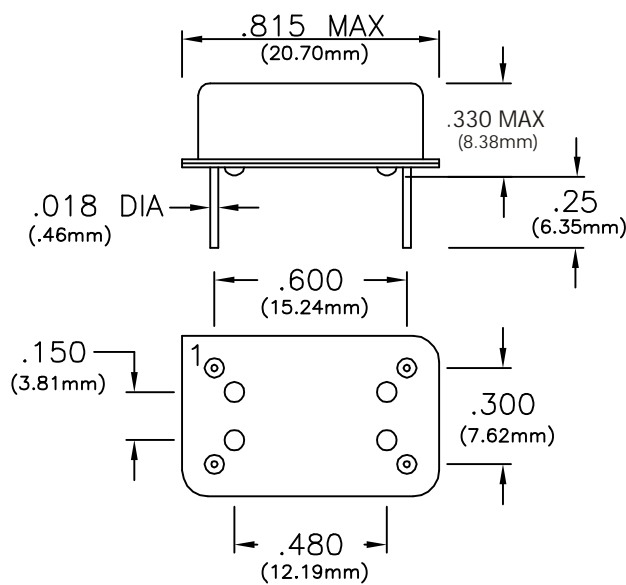
OCXO  
SERIES

CENTER  
FREQUENCY

Specifications subject to change without notice.

CRYSTAL CONTROLLED OSCILLATORS

PACKAGE OUTLINE



PIN	CONNECTION
1	N/C
7	GROUND (CASE)
8	OUTPUT
14	V <sub>cc</sub>

DIMENSIONS:  $\frac{\text{in}}{\text{mm}}$

Dimensional Tolerance:  
 $\pm .005$  (.127mm)

TEST DIAGRAM

