

T-50.09

A. GENERAL

This unit is a compact TCXO, less than 2.5 cubic inches, featuring a glass crystal and excellent long term stability with logic output.

B. OUTPUT CHARACTERISTICS

1. Frequency and Part Number: See table below.
2. Output Level: "0" Level +0.45 VDC maximum at 4.8 mA sink current
"1" Level +2.4 VDC minimum at 1.2 mA source current
3. Wave Form: Square wave
4. Load: TTL Compatible (3 Loads)
5. Rise Time: 30 nanoseconds typical
6. Fall Time: 15 nanoseconds typical
7. Duty Cycle: 40/60 to 60/40 at +1.5 VDC Level

C. FREQUENCY STABILITY

1. Part Numbers	OSC 27-5-1	OSC 27-5-2	OSC 27-5-3
2. Frequency Range (MHz)	2 to 12	2 to 12	2 to 6
3. Aging after 60 days (Max)	1 x 10 ⁻⁶ per year		5 x 10 ⁻⁷ /yr.
* 4. Ambient Range 0°C to +55°C	±1 x 10 ⁻⁶	±5 x 10 ⁻⁷	±3 x 10 ⁻⁷
5. Short Term (10 sec.) RMS	2 x 10 ⁻⁹	2 x 10 ⁻⁹	1 x 10 ⁻⁹
6. Voltage Stability	2 x 10 ⁻⁷ /2%	1 x 10 ⁻⁷ /2%	1 x 10 ⁻⁷ /2%

* Referred to frequency at +25°C

D. FREQUENCY ADJUSTMENT

1. Control: Piston type capacitor with screwdriver slot
2. Range: ± 3.5 x 10⁻⁶ minimum (sufficient for 5 years)
3. Resolution: ± 2.5 x 10⁻⁸ or better

E. POWER INPUT

1. Supply Voltage: +12.0 VDC ± 10% with 2% regulation
2. Supply Current: 25 milli-amp typical
3. Alternate Supply Voltages possible on customer request

F. MECHANICAL CONFIGURATION

1. Standard: See Sht. 1
2. Optional: See Ovenaïre Representative for alternate mechanical packages.

SHT. 2 OF 2	OSC 27-5 SERIES			ovenaïre		CHARLOTTESVILLE, VIRGINIA	
				NAME		SHT 2 OF 2	
				CATALOG TCXO		OSC 27-5 SERIES	
				TOLERANCES		SCALE	
				UNLESS OTHERWISE SPECIFIED { MILLIMETERS ± ANGLES INCH DEC ±		DWN d.h. 10-17-	
						APP'D <i>MB</i> 10-17-77	
		D REV. TO SHT. 1.		TNT	2/85	MATERIAL:	
C REV. "D", RETYPED		D.H.	10/8/77	FINISH:			
LET REVISION		BY	DATE				