

OCXO 131 Series

Features:

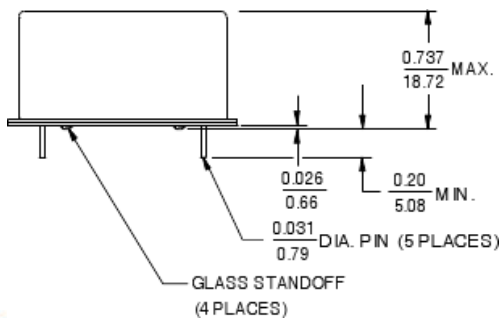
- 36.3 x 27.2 x 10.0 ~ 18.8 mm.
- SC-Cut Crystal
- Low Phase Noise
- CMOS or Sine Wave output
- Fast Warm-up



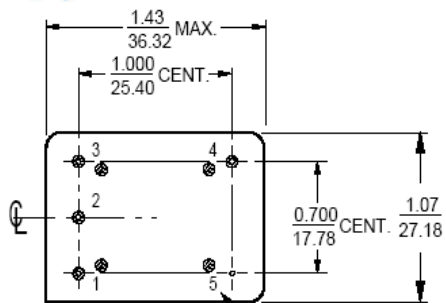
OCXO Series	Package (mm)	Supply Voltage (V)	Pulling Range	Freq. Stability (ppb)	Temp. Range (°C)	Output Logic and Symmetry		Pin Out	Lead Free	Freq. (MHz)
131 Series	L: 36.3 W: 27.2 H: 10~19	3.3 5.0 12.0	Not Connected or >10 Year Adjustment	± 1 ± 3 ± 5 ± 10 ± 20	0~+50 0~+70 -30~+70 -40~+85	Output	Symmetry	Refer To	RoHS Compliant Standard	1 to 150
						CMOS or Sine Wave	50±10% or 50±5%	OUTLINE DRAWING		

Outline Drawing

[TOP VIEW]



[BOTTOM VIEW]



MARKING



Freq. Stability vs. TEMP. Range

Temp. (°C)	ppb			
	±1	±3	±5	±10
0 to +50	○	○	○	○
0 to +70	△	○	○	○
-30 to +70	△	△	△	○
-40 to +85	X	△	△	○

○ = Standard △ = Available (case by case) X = Not available

PIN CONNECTIONS

PIN	FUNCTION
1 (See Note 1)	VCO INPUT or NOT CONNECTED
2 (See Note 1)	REFERENCE VOLTAGE or NOT CONNECTED
3	+ VDC
4	R.F. OUTPUT
5	0 VOLTS & CASE

Note1: If the specification does not specify parameters for either PIN1 or PIN2 then that respective PIN is not internally CONNECTED.

INCH
mm (Reference only)

NUMBERS FOR REFERENCE ONLY
(NOT STAMPED ON UNIT)

OCXO 131 Series

Electrical Specification*

	Min.	Nominal	Max.	Note	Unit
Output					
Frequency		10.00			MHz
Wave Form		Sine Wave			
Level	6.0	8.0	10.0		dBm
Load	47.5	50.0	52.5		Ω
Harmonics			-30		dBc
Spurious			-60		
Frequency Stability					
Ambient			± 10	Referenced to +25°C	ppb
Operating Temperature	-30		+70		°C
Aging					
At time of shipment			± 0.5		ppb
After indefinite storage					
Daily			± 0.5	After 30 days	ppb
Yearly			± 100		
10 Years			± 300		
Voltage			± 10	VDC $\pm 5\%$ change	
Warm-up			± 20	In 5 minutes @+25°C (Reference to 4 hours)	
Phase Noise					
@ 10 Hz			-90		dBc
@ 100 Hz			-120		
@ 1 kHz			-140		
@ 10 kHz			-148		
@ 100 kHz			-150		
Electrical Frequency Adjustment **					
Range	0.4		0.9	Referenced from Nominal Frequency	\pm ppm
Control	0.0		5.0		V
Slope		Positive			
Center	2	2.5	3	Control Voltage at which nominal frequency occurs at time of shipment	V
Input Impedance	100				k Ω
Input Power					
Voltage	11.4	12.0	12.6		V
Current					
@ turn on			350		mA
Steady state @25°C			1.5		W
Reference Voltage					
Voltage	7.6	8.0	8.4		V
Load	9.0		∞		k Ω
Temperature Stability			± 0.015		V

* 131-1000 model specifications provided as an example. Custom specifications available.

** The electronic frequency adjustment range is sufficient for the life of the oscillator.