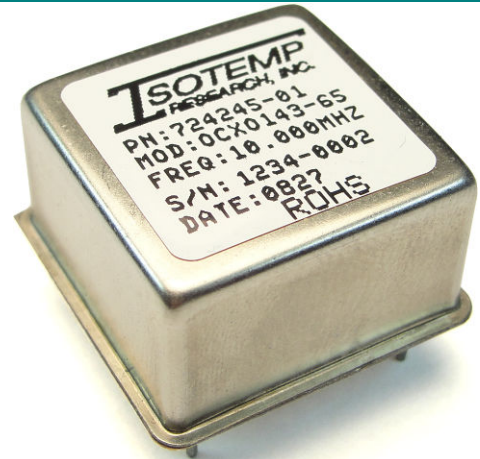


# OCXO 143 Series

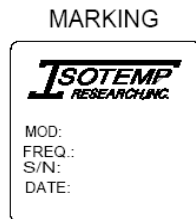
## Features:

- 25.8 x 25.4 x 10.0 ~ 15.0 mm.
- SC-Cut Crystal
- Low Phase Noise
- CMOS or Sine Wave output
- Fast Warm-up
- Ruggedized Version available.



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)
143 Series	L: 25.8 W: 25.8 H: 10~15	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 or Sine Wave	Symmetry 50±10% or 50±5%	Refer To OUTLINE DRAWING	RoHS Compliant Standard	2 to 100

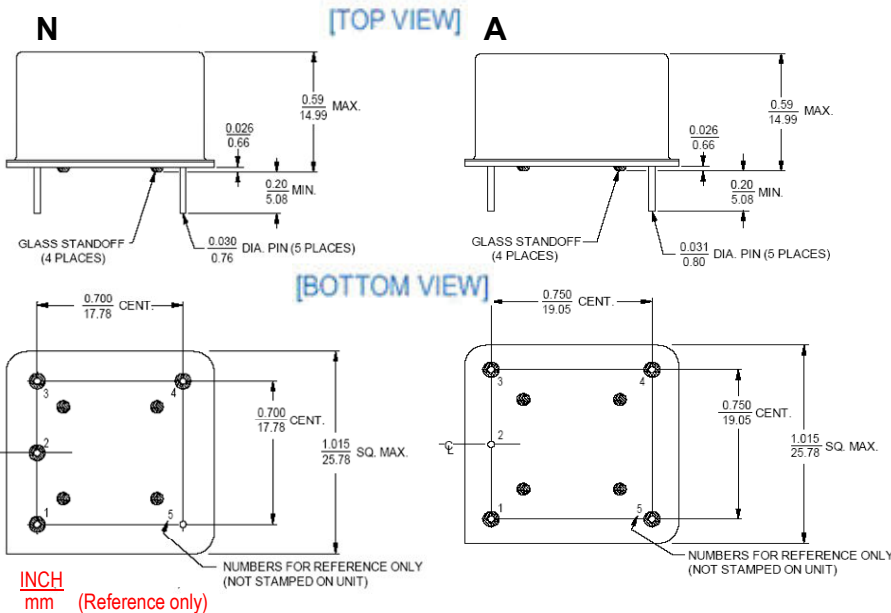
## Outline Drawing MARKING



## Freq. Stability vs. TEMP. Range

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

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



### PIN CONNECTIONS - N

PIN	FUNCTION
1*	VCO INPUT
2*	REFERENCE VOLTAGE
3	+VDC
4	R.F. OUTPUT
5	0 VOLTS & CASE

### PIN CONNECTIONS - A

PIN	FUNCTION
1	R.F. INPUT
2	0 VOLTS & CASE
3*	VCO INPUT
4*	REFERENCE VOLTAGE
5	+VDC

\* If the specification does not specify parameters for VCO input or reference voltage then that respective PIN is not internally CONNECTED.

# OCXO 143 Series

## Electrical Specification\*

	Min.	Nominal	Max.	Note	Unit
<b>Output</b>					
Frequency		10.00			MHz
Wave Form		CMOS			
Level					
"1" Level	4.5				V
"0" Level			0.5		
Load		20			pF
Duty Cycle	45		55		%
Spurious			-60		dBc
<b>Frequency Stability</b>					
Ambient			±20	Referenced to +25°C	ppb
Operating Temperature	0		+70		°C
Aging					
At time of shipment			±1.0		ppb
After indefinite storage					
Daily			±1.0	After 30 days	ppb
Yearly			±100		
10 Years			±350		
Voltage			±10	VDC ±5% change	
Warm-up			±10	In 3 minutes @+25°C (Reference to 4 hours)	
Phase Noise					
@ 10 Hz			-115		dBc
@ 100 Hz			-135		
<b>Electrical Frequency Adjustment **</b>					
Range	±0.4		±1.0	Referenced from Nominal Frequency	±ppm
Control	0.0		4.0		V
Slope		Positive			
Center	1.4	2.0	2.6	Control Voltage at which nominal frequency occurs at time of shipment	V
Linearity			±10		%
Input Impedance	50				kΩ
<b>Input Power</b>					
Voltage	4.75	5.0	5.25		V
Current					
@ turn on			700		mA
Steady state @25°C			1.5		W
<b>Reference Voltage</b>					
Voltage	3.8	4	4.2		V
Load	4		∞		kΩ
Temperature Stability			±0.010		V

\* 143-3 model specifications provided as an example. Custom specifications available.

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