

TCXO 128 Series

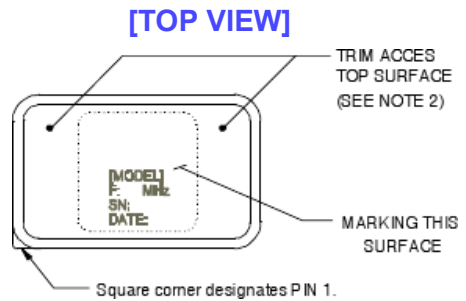
Features:

- 20.3 x 12.7 x 9.4 ~ 11 mm, standard DIP 14 package
- Sine Wave output available
- High Precision for -10°C ~ +60°C, ±0.05 ppm
- Stratum 3 Performance Available

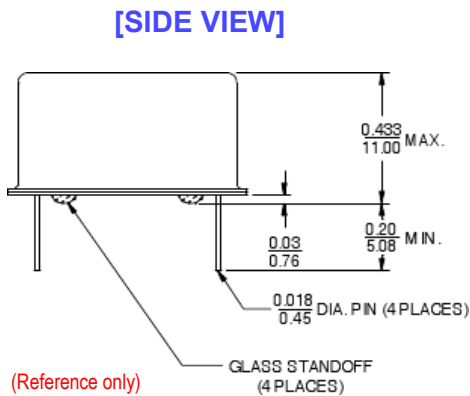


TCXO	Package (mm)	Supply Voltage (V)	Pulling Range	Freq. Stability (ppm)	Temp. Range (°C)	Output Logic and Symmetry		Pin Out	Lead Free	Freq. (MHz)
128 Series	L: 20.3 W: 12.7 H: 9.4~11	3.3 5 12	±0.05 to ±1.00	0~+55 - - - -	0~+55 -10~+60 -20~+70 -30~+85 -40~+85	Output CMOS 15pF or Clipped Sine Wave or Sine Wave	Symmetry 50±5%	Refer to OUTLINE DRAWING	RoHS Compliant	1 to 100

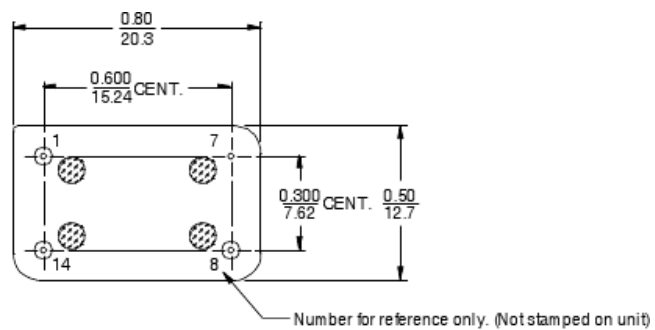
Outline Drawing



PIN CONNECTIONS	
PIN	FUNCTION
1	VCO INPUT or NOT CONNECTED
2	0 VOLTS AND CASE
3	RF OUTPUT
4	+VDC



[BOTTOM VIEW]



INCH
mm (Reference only)

TCXO 128 Series

Electrical Specification

Parameter	3.3 V		5 V		Unit
	Minimum	Maximum	Minimum	Maximum	
Supply Voltage Variation (V_{DD}) 5%	3.135	3.465	4.750	5.250	V
Frequency Range	5	100	5	100	MHz
Standard Frequency (CMOS)	5 6.4 8 8.192 10 12.5 12.8 16 16.384 19.2 19.44 20 25 26				
Standard Frequency (Clipped Sine)	8.192 10 12.5 12.8 16 16.384 19.2 19.44 20 25 26				
Frequency Tolerance	-	± 2.0	-	± 2.0	ppm
Operating Temperature Ranges					
≥ ± 0.05 ppm	0	+ 55	0	+ 55	°C
≥ ± 0.05 ppm	- 10	+ 60	- 10	+ 60	
≥ ± 0.10 ppm	- 20	+ 70	- 20	+ 70	
≥ ± 0.28 ppm	- 40	+ 85	- 40	+ 85	
Frequency stability					
VS Supply Voltage ± 5% change (CMOS)	-	± 0.3	-	± 0.3	ppm
VS Load ± 10% change	-	± 0.2	-	± 0.2	ppm / year
VS Aging	-	± 1.0	-	± 1.0	
Supply Current (CMOS) ≤ 40 MHz	-	6	-	6	mA
Supply Current (Clipped Sine) ≤ 40 MHz	-	3.5	-	3.5	
Output Level (CMOS)					
Output High (Logic "1")	90% V_{DD}	-	90% V_{DD}	-	V
Output Low (Logic "0")	-	10% V_{DD}	-	10% V_{DD}	
Duty Cycle	45	55	45	55	%
Output Level (Clipped Sine)	0.8	-	0.8	-	Vp-p
Load (CMOS)	15 pF				
Load (Clipped Sign)	10 kΩ 10 pF				
Control Voltage Range	0.5	2.5	0.5	2.5	V
Pulling Range	± 5.0	-	± 5.0	-	ppm
VCO Input Impedance	100	-	100	-	kΩ
Phase Noise @12.8 MHz (Typical)					
100 Hz	-120				dBc/Hz
1 kHz	-140				
10 kHz	-150				
Start Time	-	2	-	2	mSec
Storage Temperature Range	-55	85	-55	85	°C