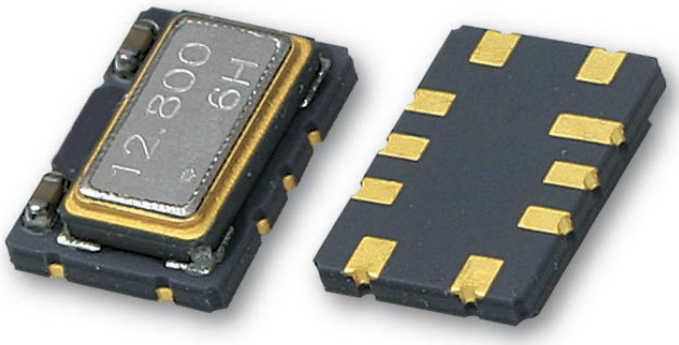
TCXO 150 Series

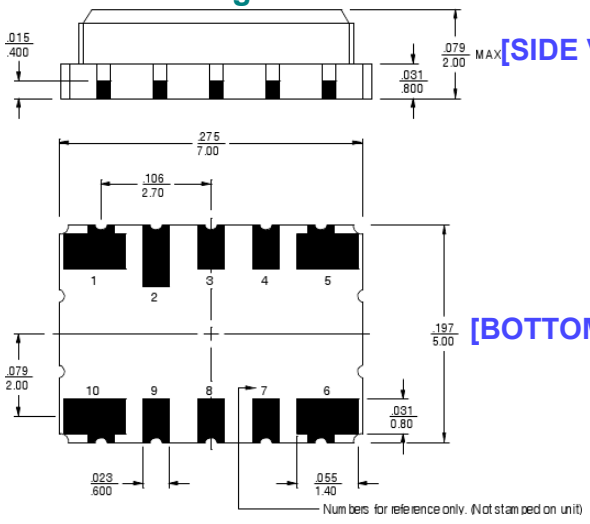
Features:

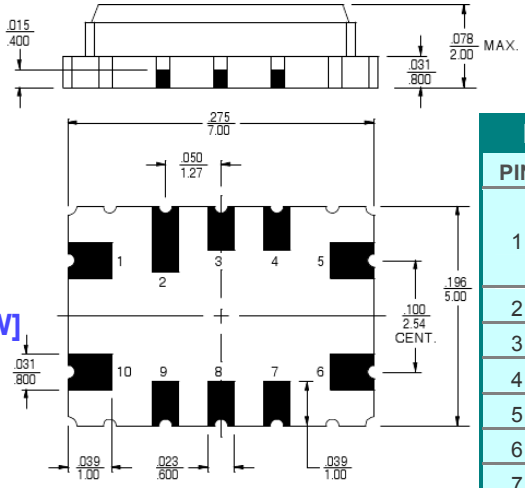
- 7.0 x 5.0 x 1.85 mm
- High Precision for -40ºC ~ +85ºC, ±0.28 ppm
- Stratum 3 Performance Available
- CMOS or Clipped Sine Wave output
- Packing: Tape & Reel 1000/3000 pcs. per reel



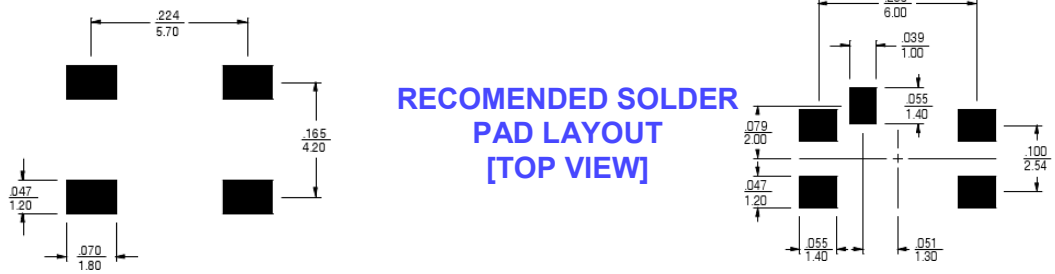
TCXO	Package (mm)	Supply Voltage (V)	Pulling Range	Freq. Stability (ppm)	Temp. Range (ºC)	Output Logic and Symmetry		Pin Out	Lead Free	Freq. (MHz)
150 Series	L: 7.00 W: 5.00 H: 1.85	3.3 5	Not Connected or >10 Year Adjustment	±0.05 to ±1.00	0~+55 -10~+60 -20~+70 -30~+85 -40~+85	Output	Symmetry	Refer To OUTLINE DRAWING	RoHS Compliant Standard	5 to 40
						CMOS 15pF or Clipped Sine Wave	50±5%			

Outline Drawing





PIN CONNECTIONS	
PIN	FUNCTION
1	VCO INPUT or NOT CONNECTED
2	NOT CONNECTED
3	NOT CONNECTED
4	NOT CONNECTED
5	0 VOLTS AND CASE
6	RF OUTPUT
7	NOT CONNECTED
8	NOT CONNECTED
9	RF ENABLE or NOT CONNECTED
10	+VDC



INCH
mm (Reference only)

TCXO 150 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	40	5	40	V
Standard Frequency (for CMOS)	5 | 6.4 | 8 | 8.192 | 10 | 12.5 | 12.8 | 16 | 19.44 | 25				MHz
Standard Frequency (for Clipped sine)	10 | 12.5 | 12.8 | 16 | 19.44 | 25				
Frequency Tolerance	-	± 2.0	-	±2.0	ppm
Operating Temperature Ranges					
≥ ± 0.05 ppm	0	+ 55	0	+ 55	ºC
≥ ± 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	
VS Aging	-	± 1.0	-	± 1.0	ppm / year
Supply Current (CMOS)	-	6	-	6	mA
Supply Current (Clipped Sine)	-	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 Sine)	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	-148				
Start Time	-	2	-	2	mSec
R.F. Enable (Optional)					
Disable	-	(V_{DD})*30%	-	(V_{DD})*30%	V
Enable	(V_{DD})*70%	-	(V_{DD})*70%	-	
Storage Temperature Range	-55	125	-55	125	ºC