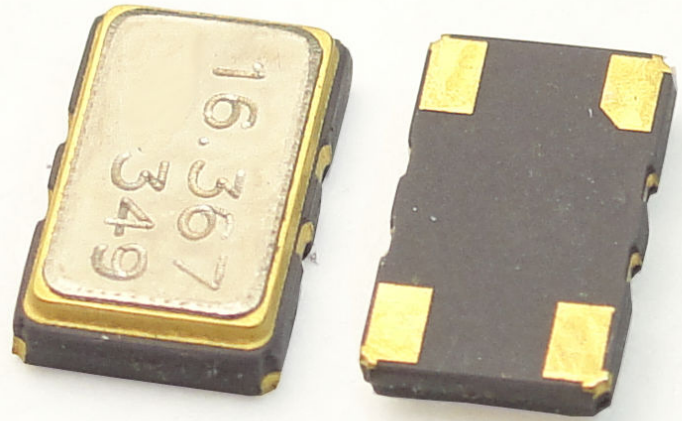


TCXO 152 Series

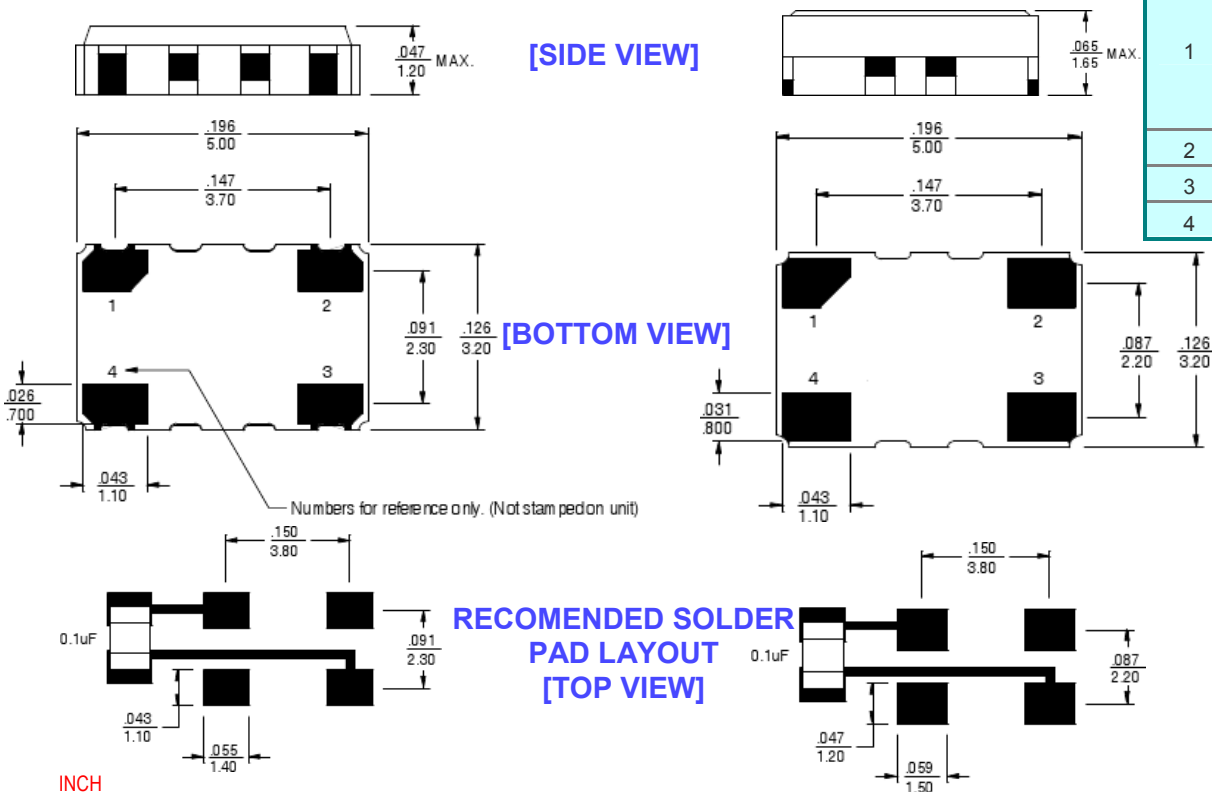
Features:

- 5.0 x 3.2 x 1.2 ~ 1.65 mm
- High Precision for -40°C ~ +85°C, ±0.28 ppm
- Stratum 3 Performance Available
- CMOS or Clipped Sine Wave output
- Packing: Tape & Reel 1000/3000 pcs. per reel



TCXO Series	Package (mm) L: 5.0 W: 3.2 H: 1.2~1.65	Supply Voltage (V) 3.3 5	Pulling Range Not Connected or >10 Year Adjustment	Freq. Stability (ppm) ±0.10 to ±1.00	Temp. Range (°C) 0~+55 -10~+60 -20~+70 -30~+85 -40~+85	Output Logic and Symmetry		Pin Out Refer To OUTLINE DRAWING	Lead Free RoHS Compliant Standard	Freq. (MHz) 10 to 40
						Output CMOS 15pF or Clipped Sine Wave	Symmetry 50±5%			

Outline Drawing



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

TCXO 152 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	10	40	10	40	MHz
Standard Frequency (for CMOS)	10 12.8 19.2 20 26				
Standard Frequency (for Clipped Sine)	10 12.8 19.2 20 26				
Frequency Tolerance	-	± 2.0	-	± 2.0	ppm
Operating Temperature Ranges					
$\geq \pm 0.10$ ppm	0	+ 55	0	+ 55	°C
$\geq \pm 0.10$ ppm	- 10	+ 60	- 10	+ 60	
$\geq \pm 0.10$ ppm	- 20	+ 70	- 20	+ 70	
$\geq \pm 0.28$ ppm	- 40	+ 85	- 40	+ 85	
Frequency stability					
VS Supply Voltage $\pm 5\%$ change (CMOS)	-	± 0.2	-	± 0.2	ppm
VS Load $\pm 10\%$ 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% VDD	-	90% VDD	-	V
Output Low (Logic "0")	-	10% VDD	-	10% VDD	
Duty Cycle	45	55	45	55	%
Output Level (Clipped Sine)	0.8	-	0.8	-	Vp-p
Load (CMOS)	15 pF				
Load (Clipped Sine)	10 k Ω 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	-	k Ω
Phase Noise @12.8 MHz (Typical)					
100 Hz	-125				dBc/Hz
1 kHz	-145				
10 kHz	-150				
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	°C