

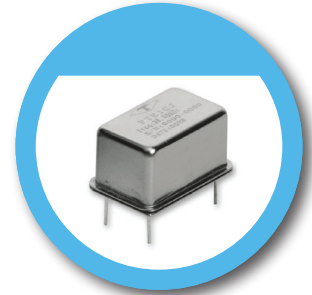
20.4 x 12.8 mm Oven Controlled Crystal Oscillator – NF Type

FEATURE

- Dimension 20.4 x 12.8 x 11.0 mm typical, standard DIP 14 package.
- Stratum 3 (Overall ± 4.6 ppm including 10 years aging.)
- AT Cut Crystal.
- Packing: 40pcs/Box, 6 Box/Carton, 240pcs /Carton.

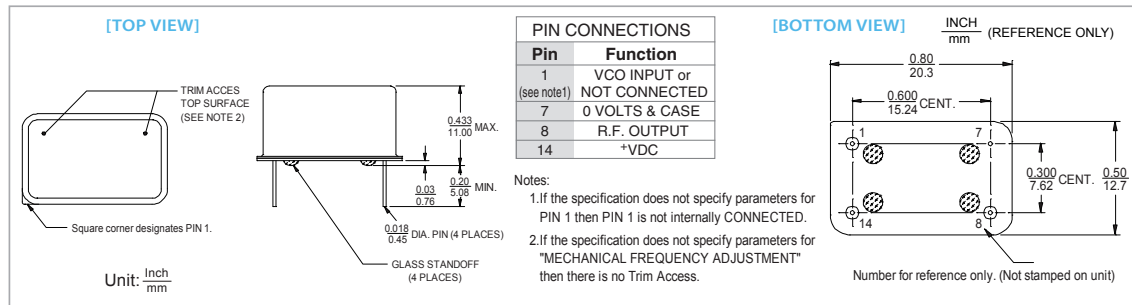
TYPICAL APPLICATION

- SDH/SONET, Telecommunication base station
- Test and measurement equipment
- Aerospace
- Synthesizer, Digital switch, Reference Timing Circuit



RoHS Compliant Standard

DIMENSION



ELECTRICAL SPECIFICATION

Parameter	Min.	Nominal	Max.	Unit	Test Condition
Output					
Frequency	10, 12, 20, 24, 26, 38.88			MHz	
Wave Form		CMOS			
Level "1"	3.5			V	
Level "0"			0.3		
Load		15		pF	
Spurious			-60	dBc	
Frequency Stability					
Ambient			± 200	ppb	Referenced to +25°C
Operating Temperature	-30		+70	°C	
Storage Temp. Range	-40		+85		
Aging					
At time of shipment			± 0.5	ppm	
After indefinite storage - Daily			± 5.0	ppb	
- Yearly			± 0.5	ppm	
- 10 years			± 4.6		
Voltage			± 50	ppb	Overall
Warm-up			± 150		$\pm 5\%$ Change
Phase Noise @ 10 MHz		-85		dBc	In 5 minutes @ +25°C (Referenced to 30Minutes)
		-115			@ 10Hz
		-135			@ 100Hz
		-140			@ 1KHz
					@ 10KHz
Electrical Frequency Adjustment					
Range	5			ppm	
Control	0		5	V	
Slope		Positive			
VCO Input impedance	100			K Ω	
Input Power					
Voltage	4.75	5	5.25	V	
Current		215		mA	turn on
Steady state		110			@ 25°C

Standard frequencies are frequencies which the crystal has been designed and does not imply a stock position.

FREQ. STABILITY vs. TEMP. RANGE

Temp. (°C)	ppb	± 50	± 100	± 200
0 ~ +70		○	○	○
-20 ~ +70		△	○	○
-40 ~ +85		×	△	○

* ○: Available △: Conditional X: Not available