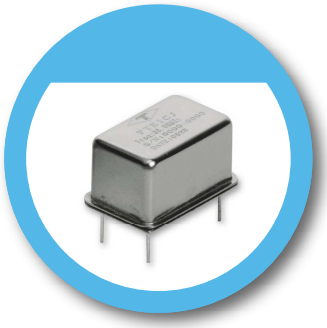
NF Type
20.3 x 12.7 mm Oven Controlled Crystal Oscillator

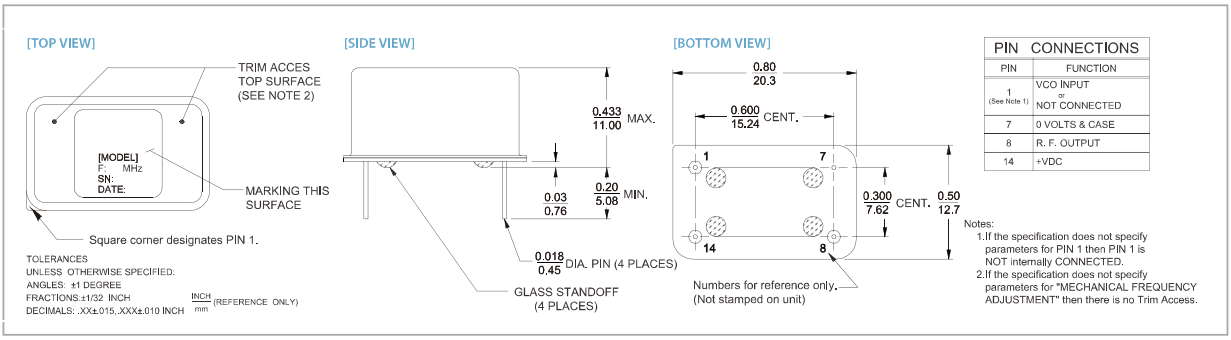


RoHS Compliant

FEATURE
- Dimension 20.3 x 12.7 x 11.0 mm typical
- Stratum 3 (Overall ± 4.6 ppm including 10 years aging.)

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

DIMENSION



ELECTRICAL SPECIFICATION

Parameter		Min.	Typ.	Max.	Unit	Test Condition & Notes
Output	Frequency		10		MHz	Available frequency range is from 5MHz to 40MHz. Standard frequencies are 10, 12.8, 15.36, 19.2, 20, 26 and 38.88MHz.
	Waveform		Rectangular			Sine wave output is available. Consult factory for more information.
	"1" Level	2.4			V	
	"0" Level			0.5		
	Load		15		pF	
	Duty cycle	45	50	55	%	@2.0 V
	Spurious			-60	dBc	
Frequency Stability	Ambient	-0.1		-0.1	ppm	-30°C to +70°C, referenced to +25°C Refer to Freq. Stability Vs Temp. Range table.
	Aging	-5.0		+5.0	ppb	Per day,at time of shipment
	Daily	-5.0		+5.0	ppb	after 30 days
	Yearly	-0.5		+0.5	ppm	
	10 years	-3.0		+3.0		
	Voltage	-50		+50	ppb	±5% Change
	Warm-up	-0.1		+0.1	ppm	In 2 minutes @ +25°C, referenced to 1 hour
	Phase Noise			-105	dBc/Hz	@ 10 Hz
				-130		@ 100 Hz
				-140		@ 1 kHz
				-150		@ 10 kHz
Electrical Frequency Adjustment						
	Range			-5.0	ppm	VCO @ 0 V
		5.0			ppm	VCO @ +5.0 V
	Control	0	2.5	5.0	V	
	Slope		Positive			
	VCO Input impedance	100			kΩ	
Input Power	Voltage	4.75	5.0	5.25	V	3.3V input voltage is available. Consult factory for control voltage and output level.
	Current			400	mA	@ turn on
	Steady state			0.8	W	@ +25°C

FREQ. STABILITY vs. TEMP. RANGE

Temp. (°C) \ ppb	±50	±100	±200
0 ~ +70	○	○	○
-30 ~ +70	△	○	○
-40 ~ +85	△	○	○

* ○: Available △:Conditional X: Not available

Note: not all combination of options are available. Other specifications may be available upon request.

Specifications subject to change without notice.

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