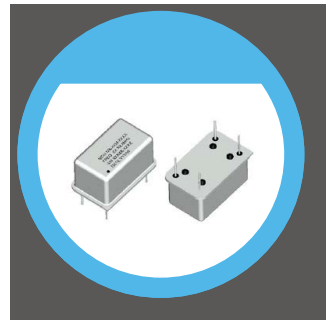
NB Type
20.3 x 12.7 mm Oven Controlled Crystal Oscillator

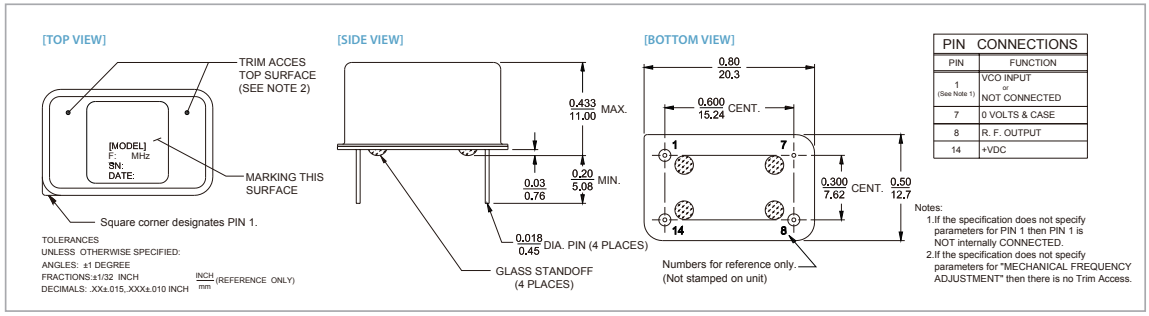


RoHS Compliant

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



PIN	CONNECTIONS
PIN	FUNCTION
1 (See Note 1)	VCO INPUT or NOT CONNECTED
7	0 VOLTS & CASE
8	R. F. OUTPUT
14	+VDC

Notes:
1.If the specification does not specify parameters for PIN 1 then PIN 1 is NOT internally CONNECTED.
2.If the specification does not specify parameters for "MECHANICAL FREQUENCY ADJUSTMENT" then there is no Trim Access.

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.

www.sinogtr.com
sales01@sinogtr.com

Rev(9)01/2020