

NJ Type

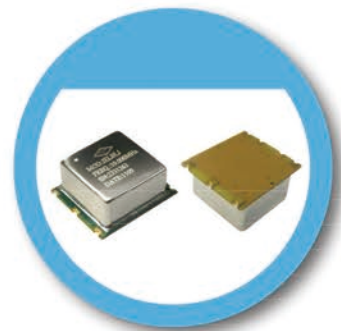
25.4 x 22.1 mm Oven Controlled Crystal Oscillator

FEATURE

- Dimension 25.4 x 22.1 x 11.0 mm typical.
- SC Cut Crystal.

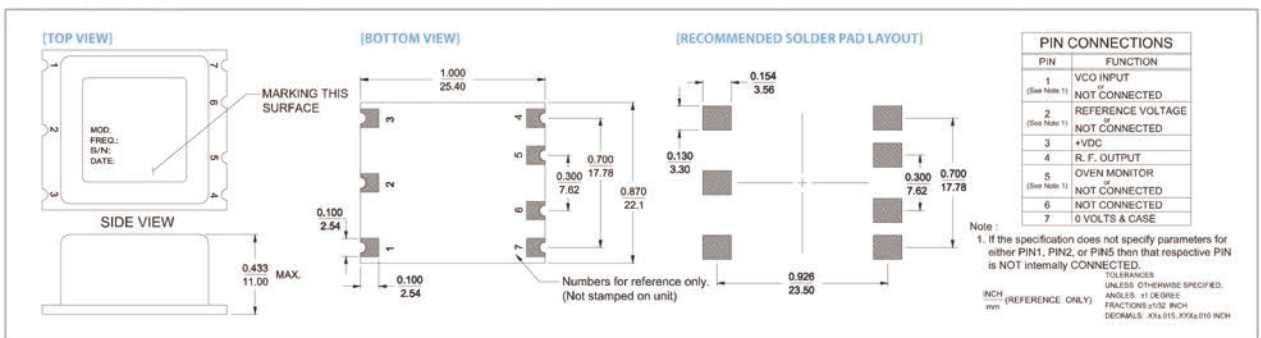
TYPICAL APPLICATION

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



RoHS Compliant

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, 16.384, 19.2, 20 and 25MHz.
	Waveform		Rectangular			Sine wave output is available. Consult factory for more information.
	Level		HCMOS			
	"1" Level	+2.4	+3.3		V	
	"0" Level			+0.4		
	Load		15		pF	
Frequency Stability	Duty cycle	45	50	55	%	@ +1.4V
	Spurious			-60	dBc	
	Ambient	-10		+10	ppb	0°C to +70°C, referenced to +25°C
	Aging	-0.5		+0.5	ppb	Refer to Freq. Stability Vs Temp. Range table.
	Daily	-0.5		+0.5	ppb	Per day, at time of shipment
	Yearly	-50		+50	ppb	after 30 days
	10 years	-0.4		+0.4	ppm	
	Voltage	-0.5		+0.5	ppb	±5% Change
	Warm-up	-10		+10	ppb	In 2 minutes @ +25°C, referenced to 1 hour
	Phase Noise			-115	dBc/Hz	@ 10 Hz
Electrical Frequency Adjustment				-130		@ 100 Hz
				-140		@ 1 kHz
				-150		@ 10 kHz
	Range	+0.5		-0.5	ppm	VCO @ 0 V
Input Power	Control	0	1.4	2.8	V	VCO @ +2.8 V
	Slope		Positive			
	Input impedance	100			kΩ	
	Voltage	3.135	3.3	3.465	V	5.0V input voltage is available. Consult factory for control voltage and output level.
Reference Voltage	Current			1000	mA	@ turn on
	Steady state			1.2	W	@ +25°C
	Voltage	2.7	2.8	2.9	V	
Reference Voltage	Load	9			kΩ	

FREQ. STABILITY vs. TEMP. RANGE

Temp. (°C)	ppb	±5	±10	±20
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.

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Specifications subject to change without notice.