Precision Devices, Inc.

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Electrical Specifications

1. Center Frequency (fo): 24.000000 MHz
2. Input Voltage: V1 = +3.3Vdc ±0.17v maximum
3. Supply Ripple & Noise: 50mV peak/peak sinewave @ any frequency between 100 Hz and 12 MHz
4. Input Current: 3mA maximum
5. Frequency: Frequency shall be set to within ±1ppm of desired frequency fo at +25°C at time of shipping.
6. RF Output: Within 500 mS maximum after application of input voltage.
7. Load VSWR: RF output must withstand continuous applications of loads of any VSWR including short and open circuit conditions.
8. Output Waveform: Sinewave 0.7 volt peak to peak min. Output shall be AC coupled (DC open)
9. Oscillator Load: 5pf ±10% maximum in parallel 10K Ohms +10% minimum
10. Long Term Aging: Less than 5ppm/10 years maximum
11. Temperature Stability: ±2.0ppm maximum when run over a temperature loop starting at +25°C, going to -45°C up to +85°C and back to -25°C with transistion rates of 2°/minute
12. Voltage Stability: ±0.2ppm maximum @+25°C for the input range
13. Acceleration Sensitivity: 0.001ppm/G maximum
14. Harmonics: The 2nd harmonics must be less than -15dBc minimum relative to carrier
15. Spurious: -60dBc maximum, -50dBc maximum during vibration.
16. Phase Noise:
    - @ 1Hz: -47dBc/Hz Maximum
    - @ 10Hz: -82dBc/Hz Maximum
    - @ 100Hz: -112dBc/Hz Maximum
    - @ 1kHz: -132dBc/Hz Maximum
    - @ 10kHz: -142dBc/Hz Maximum
    - @ 100kHz: -147dBc/Hz Maximum
17. Response to Supply Ripple: With the specified power supply ripple, the total power of the spurious outputs at frequencies removed from fo by 100Hz to 12Mhz must be no greater than -57dBc maximum
18. Temperature Range: Operating; -45°C to +85°C, Storage; -65°C to +85°C
19. Cold Temperature Start-Up: After and extended cold soak at -55°C with no power applied, the part shall start-up and run with application of power.

Note: Additonal requirements per customer drawing 277-0825-030

REV.	DATE	PAGE	DESCRIPTION	ECN

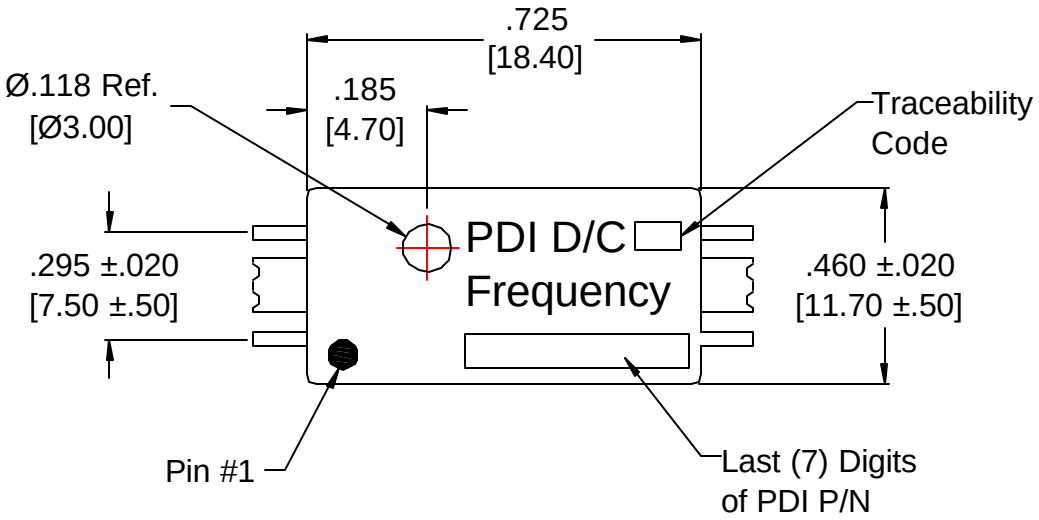
Originator	Date	Engineering	Date
D.G.	6/15/09	B.A.	6/15/09

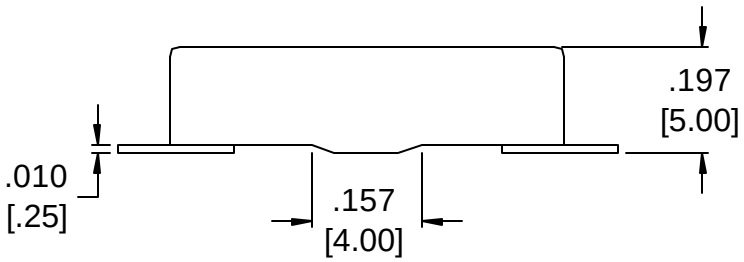
TITLE	FKA
Temperature Controlled Crystal Oscillator	17203

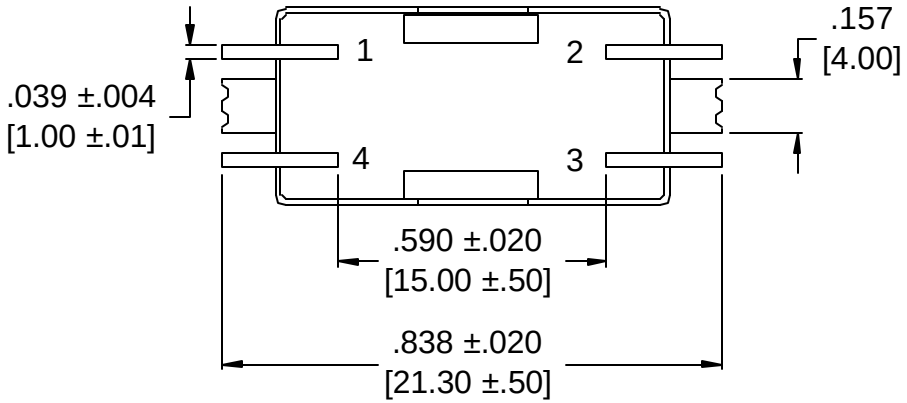
PART NUMBER **TC2624000XWLDXX**

DATE	SCALE	ECN.	REV.
6/15/09	N.T.S.	N/A	A

SIZE	CAGE	
A	0S4G1	Page 1 of 2







Pin	Connection
1	No Connect
2	Ground
3	Output
4	Supply

GREEN PRODUCT
RoHS
Compliant
EU 2002/95/EC
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Manufacturer of Quartz Crystal Products

DECIMAL XX=±.020 XXX=±.008	DWG FILE 17203	PART NUMBER TC2624000XWLDXX	
METRIC XX=±.50 XXX=±.20	SCALE N.T.S.	FREQUENCY 24.000 MHz	DRAWN BY D. Gibney
ANGULAR XX=±2°	DRAWING TYPE Temperature Controlled Crystal Oscillator		DATE 6/15/09
	REV. LEVEL A	ECN NO. N/A	CAGE CODE 0S4G1