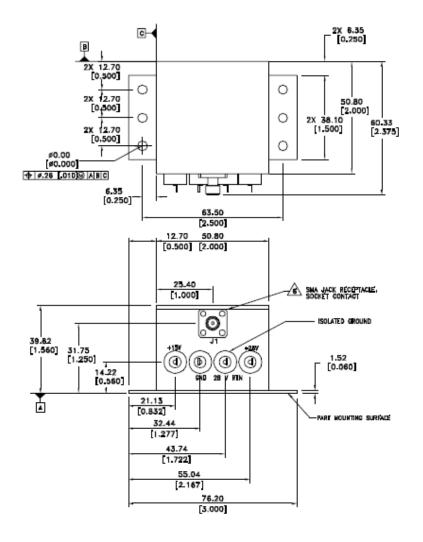
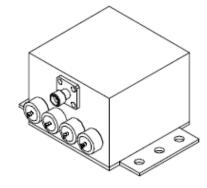
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Wenzel Associates, Inc.								
Title: 100.0	stal Oscil	llator						
^{P/N:} 501-27273	Rev:	Date 0	9-30-13	Drawn:	Ref: OCXO-1			
Tolerances: (except as noted) Dimensions are in inches	0.XX Dec: ±0.03	0"	0.XXX Dec: ±0.010"	FSCM: 62821	Page 1 of 3			

Matrix Display and Construction Parts and Matrix Busin Crystell MIL (PF 65310 Suppled Premium 0, 2 swept, synthetic quarts Display 0, 2 swept, synthetic quarts Displa	GENERAL REQUIREMENTS		1	REV	DATE	REVISION RECORD	DWN	AUTH
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Outgossing Traceballing Deraining Derai		Supplied						
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T day 22 x 10 ⁹ 1 month ±2 x 10 ⁹ 1 month ±5 x 10 ⁹ 1 F Output Power 13 dBm s1.5 dB into 500 1 F Output Swinnenics 40 dBs 1 F Output Swinnenics 5 00 dBc 100 KHz to 1 GHz 1 F Output Swinnenics 5 00 dBc 1 F Output Swinnenics 5 00 dBc 1 KHz 130 dBc/Hz 1 00 Hz 100 KHz 1 KHz 130 dBc/Hz 1 00 Hz 100 dBc/Hz 1 0 KHz 150 dBc/Hz 1 0 kHz 10 dBc/Hz </td <td></td> <td>$\pm 1 \times 10^{-1}$ 101 - 10 0 10 + 30 0 (161 + 23 0)</td> <td>Fivi (Fiight</td> <td>wouel)</td> <td>1</td> <td></td> <td></td> <td>uct level</td>		$\pm 1 \times 10^{-1}$ 101 - 10 0 10 + 30 0 (161 + 23 0)	Fivi (Fiight	wouel)	1			uct level
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AF Cutput Spurious <-100 dBc, 100 KHz to 1 GHz	RF Output Sub-harmonics						able 2, Qua	al Table 3
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Austin, Texas Title: 100.0 MHz-SC Space Crystal Oscillator P/N: Rev: Date: Drawn: Ref: OCXO-1 Tolerances: 0.XX Dec: 0.XX Dec: FSCM: O	Physical	Pressure relief holes, vented						
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Austin, Texas Title: 100.0 MHz-SC Space Crystal Oscillator P/N: Rev: Date: Drawn: Ref: OCXO-1 Tolerances: 0.XX Dec: 0.XX Dec: FSCM: Occol						Wenzel Associates. In	C.	
100.0 MHz-SC Space Crystal Oscillator P/N: Rev: Date: Drawn: Ref: OCXO-1 501-27273 - 0.XX Dec: FSCM: 0.200 0.200								
P/N: Rev: Date: Drawn: Ref: OCXO-1 Tolerances: 0.XX Dec: 0.XXX Dec: FSCM: 0.00000000000000000000000000000000000				Title				
501-27273 - 09-30-13 OCXO-1 Tolerances: 0.XX Dec: 0.XXX Dec: FSCM: 0.2					100	0.0 MHz-SC Space Crystal Os	scillator	
Tolerances: 0.XX Dec: 0.XXX Dec: FSCM:							Ref	
					501-272	273 - 09-30-13	(JCXO-1
$\begin{array}{c} \begin{array}{c} (\text{except as noted}) \\ \text{Dimensions are in inches} \end{array} \\ \pm 0.030" \\ \end{array} \\ \pm 0.010" \\ \end{array} \\ \begin{array}{c} \pm 0.010" \\ \end{array} \\ \begin{array}{c} \text{Page 2 of 3} \end{array}$						0.XX Dec: 0.XXX Dec: FSCM:		
							Page 2	2 of 3
			•					

QUALIFICATION TESTS (Non-flight model, only)

Group I (1 samples) Burn-In (operational) Group II (1 samples)	Visual, Electrical Tests* 240 hours minimum at +75°C
Aging	30 Days
Group III Subgroup 1 (1 sample) Random Vibration	11.95 Grms, MIL-STD-202, method 214 I-D, 50 to 2000 Hz, 5 min per axis

Shock Group III Subgroup 2 (1 sample) Thermal Shock

Ambient Pressure Group III Subgroup 3 (1 sample) Resistance to Soldering Heat Group III Subgroup 4 (1 sample) Terminal Strength

Solderability Resistance to Solvents

Electrical Tests* Radiographics

ACCEPTANCE TESTS (Flight Model)

Electrical Tests* Random Vibration (non-operational) 7.56 Grms overall, MIL-STD-202 Method 214 Test Cond I-B,

Thermal Shock

Electrical Tests* Burn-In (operational) Aging Rate Electrical Tests* Radiographics 5 Cycles, -55°C to +85°C 240 hours minimum at +75°C Projected to 30 days operating

MIL-STD-202, Method 107, Condition A,

MIL-STD-202, Method 213, Condition A, 50G, 11msec

MIL-STD-202, Method 107, Condition A-1,

MIL-STD-202. Method 105. at <5 x 10⁻⁵ torr

MIL-STD-202, Method 210, Condition A

MIL-STD-202, Method 211, Condition C,

Not applicable when marking is electro-etched

25 cycles, -55° C to $+85^{\circ}$ C

Not applicable for pins <0.25"

MIL-STD-202, Method 208 MIL-STD-202, Method 215

MIL-STD-202, method 209

50 to 2000 Hz. 5 min per axis

MIL-STD-202, method 209

*ELECTRICAL TESTS

Tested at ambient pressure $\leq 5 \times 10^{-5}$ torr and at -40, +25, and 75 °C unless otherwise noted

Warm-Up Power (-40 $^{\circ}$ C only) Warm-Up Time (-40 $^{\circ}$ C only) Input Power Cold Start (-40 $^{\circ}$ C) Hot Start (+75 $^{\circ}$ C) RF Output Power RF Output Harmonics RF Output Harmonics RF Output Spurious Frequency Accuracy (+25 $^{\circ}$ C only) Frequency Stability Phase Noise - Static (+25 $^{\circ}$ C only, 760 torr)

ANALYSES

Thermal Analysis, Component Stress Analysis

REV	DATE	REVISION RECORD	DWN	AUTH
-	11-16-08	Draft	Liz	

Wenzel Associates, Inc.								
Title: 100.0 MHz-SC Space Crystal Oscillator								
^{P/N:} 501-27273	Rev:	Date 0	9-30-13	Drawn:	vn: Ref: OCXO-			
Tolerances: (except as noted) Dimensions are in inches	0.XX Dec: ±0.03	0"	0.XXX Dec: ±0.010"	FSCM: 62821	Ρ	age 3 of 3		