

DWG NO 7882	REV B	APPLICATION		REVISIONS																																																																																																																																																																			
	SH 1	NEXT ASSY	USED ON	REV	DESCRIPTION								DATE				APPROVED																																																																																																																																																						
		FINAL	6745-XX	A	REVISED CHART 1, SEE 3								8/21/00				LB																																																																																																																																																						
				B	ADDED DASH 53								9/7/00				AWB																																																																																																																																																						
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UNLESS OTHERWISE SPECIFIED DIMENSION ARE IN INCHES TOLERANCES ARE FRACTIONS DECIMALS ANGLES ±1/64 .XX=±.02 ±1° .XXX=±.010		CONTRACT NO.		M PC		MONITOR PRODUCTS CO., INC. OCEANSIDE, CALIFORNIA		SPECIFICATION CONTROL, VCXO, 14DIP/4																																																																																																																																																															
MATERIAL		APPROVALS		DATE		DRAWN AWB 3/4/99		CHECKED LB 3/4/99		ISSUED		SIZE		CAGE CODE		DWG NO		REV B																																																																																																																																																					
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- 1.0 MONITOR PART NUMBER 6745-XX
- 2.0 CLASSIFICATION OSCILLATOR, CRYSTAL, VOLTAGE CONTROL
- 3.0 ELECTRICAL CHARACTERISTICS (NOTE 1)
- 3.1 NOMINAL FREQUENCY SEE CHART 1, SHEET 3
- 3.1.1 CALIBRATION TOLERANCE ± 25 PPM AT $+25^{\circ}\text{C} \pm 3^{\circ}\text{C}$ WITH $V_C = +2.50\text{VDC} \pm 0.05\text{VDC}$
- 3.1.2 ADJUSTMENT RANGE _____
- 3.1.2.1 ADJUSTMENT RESOLUTION _____
- 3.1.3 STABILITY
- 3.1.3.1 FREQUENCY vs AMBIENT 25 PPM FROM 0°C TO $+70^{\circ}\text{C}$
- 3.1.3.2 FREQUENCY vs VOLTAGE BETTER THAN 1 PPM FOR A 5% CHANGE
- 3.1.3.3 FREQUENCY vs LOAD 2×10^{-7} MAX FROM NO LOAD TO 15pF
- 3.1.3.4 OVERALL STABILITY _____
- 3.1.3.4.1 SHORT TERM 1×10^{-9} / 100mSEC MAX
- 3.1.3.4.2 LONG TERM 30 PPM MAX OVER 10 YRS
- 3.1.3.4.3 PHASE JITTER LESS THAN 0.2nSEC
- 3.1.3.4.4 WARM UP TIME 1 SEC MAX
- 3.2 WAVE FORM HCMOS COMPATIBLE
- 3.2.1 SYMMETRY/THD 50 $\pm 10\%$ AT $V_{CC}/2$
- 3.2.2 AMPLITUDE LOGIC "0" = $+0.1$ MAX / LOGIC "1" = $V_{CC} - 0.1$ V
- 3.2.3 RISE/FALL TIME 4nSEC TYP 6nSEC MAX
- 3.2.4 LOAD 15pF
- 3.3 VCXO TRANSFER CHARACTERISTICS
- 3.3.1 TOTAL FREQUENCY CHANGE $+0.5$ VDC TO $+2.5$ VDC - 100 PPM TYPICAL
 $+2.5$ VDC TO $+4.5$ VDC - 100 PPM TYPICAL
- 3.3.2 CONTROL VOLTAGE RANGE $+0.5$ VDC TO $+4.5$ VDC
- 3.3.3 TRANSFER COEFFICIENT and SENSE POSITIVE SENSE
- 3.3.4 LINEARITY $\pm 20\%$
- 3.3.5 MODULATION RATE/RESPONSE 10 kHz OR GREATER
- 3.4 POWER INPUT
- 3.4.1 OSCILLATOR VOLTAGE/CURRENT $+5.0$ VDC $\pm 5\%$ / 45mA 30mA TYP
- 4.0 ENVIRONMENTAL
- 4.1 AMBIENT TEMPERATURE RANGE
- 4.1.1 OPERATING 0°C TO $+70^{\circ}\text{C}$
- 4.1.2 STORAGE -55°C TO $+125^{\circ}\text{C}$
- 4.2 VIBRATION 10-55 Hz 0.060"DIA 55Hz - 2000Hz 20G's
- 4.3 SHOCK 1000G's 0.35mSEC 1/2 SINE 3 SHOCKS EACH PLANE
- 4.4 HUMIDITY 85% RH AT 85°C 1000HRS
- 4.5 OTHER _____

NOTE 1 - ALL PERFORMANCE FIGURES ARE MEASURED UNDER THE FOLLOWING TEST CONDITION

A. AMBIENT TEMP. $+25^{\circ}\text{C} \pm 5^{\circ}\text{C}$ EXCEPT PARA 3.1.3.1

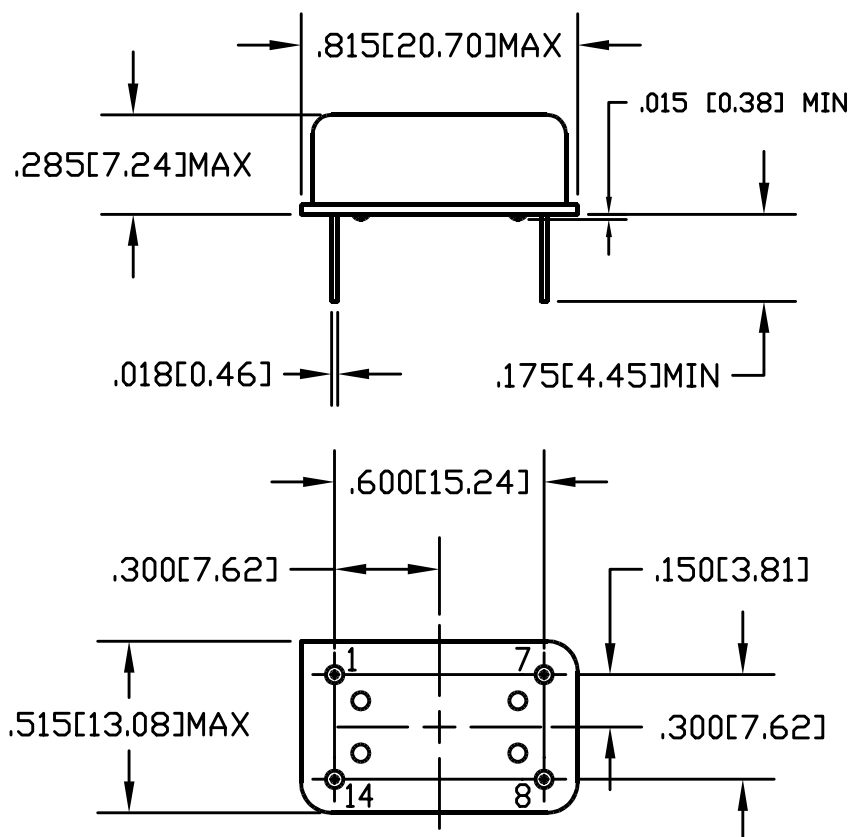
B. INPUT VOLTAGES: NOMINAL $\pm 1\%$ EXCEPT PARA 3.1.3.2.

SIZE A	CAGE CODE 54331	DWG NO 7882	REV B
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CHART 1					
DASH NO.	FREQUENCY (MHz)	DASH NO.	FREQUENCY (MHz)	DASH NO.	FREQUENCY (MHz)
-01	10.000000	-21	24.704000	-41	37.844000
-02	12.352000	-22	64.512000	-42	34.560000
-03	14.318180	-23	20.456000	-43	18.688000
-04	16.128000	-24	24.545400	-44	18.528000
-05	20.000000	-25	27.000000	-45	80.000000
-06	24.000000	-26	29.500000	-46	19.444000
-07	33.333333	-27	51.843200	-47	39.321600
-08	40.000000	-28	16.384000	-48	35.328000
-09	48.000000	-29	25.920000	-49	20.480000
-10	50.000000	-30	8.192000	-50	25.000000
-11	51.840000	-31	19.440000	-51	49.152000
-12	57.600000	-32	32.768000	-52	37.056000
-13	63.488000	-33	38.880000	-53	32.000000
-14	64.000000	-34	24.576000	-54	
-15	65.536000	-35	30.000000	-55	
-16	66.666666	-36	77.760000	-56	
-17	68.249600	-37	44.736000	-57	
-18	75.000000	-38	9.538086	-58	
-19	18.432000	-39	18.726000	-59	
-20	30.000000	-40	34.368000	-60	

NOTES:

1. APPLICABLE STANDARDS/SPECIFICATION
ANSI Y14.5M-1982, DIMENSIONS AND TOLERANCES
2. DIMENSIONS IN BRACKETS ARE METRIC
3. PIN NUMBERS ARE FOR REFERENCE ONLY

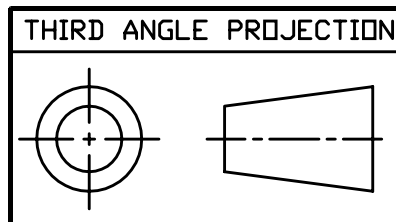


5.0 MECHANICAL

5.1 MATERIAL/FINISH NICKEL PLATED STEEL / HOT TIN DIPPED PINS

5.2 PIN CONNECTION

1. VC
7. GROUND
8. OUTPUT
14. +5.00 VDC



SIZE A	CAGE CODE 54331	DWG NO 7882	REV B
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