REV D | SH 1 | DWG NO 7663

APPLICATION	
NEXT ASSY	USED ON
FINAL	6720-XX

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	REVISED CHART 1 TO -29	2/19/97	AWB
B	3.2.1 WAS 50% ±10% / 3.1.3.1 WAS 100PPM/40°C TO +85°C/ADDED -30 TO CHART 1	2/28/97	LB
C	LOGIC"0" WAS +0.1 V MAX LOGIC"1" WAS +4.9 V MAX	4/3/97	LB
D	UNIT HEIGHT WAS 0.285 UPDATED TABLE 1 SHEET 3	6/26/97	MSA

DUPLICATE DRAWING
DO NOT REVISE

REV																							
SHEET	43	44	45	46	47	48	49	50															
REV																							
SHEET	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42

REV STATUS OF SHEETS																				
REV	D	D	D	D																
SHEET	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	

UNLESS OTHERWISE SPECIFIED DIMENSION ARE IN INCHES
TOLERANCES ARE
FRACTIONS DECIMALS ANGLES
±1/64 .XX=±.02 ±1°
.XXX=±.010

MATERIAL

FINISH

DO NOT SCALE DRAWING

CONTRACT NO.

APPROVALS	DATE
DRAWN AWB	2/4/97
CHECKED WBA	2/10/97
ISSUED LB	2/11/97

MPC MONITOR PRODUCTS CO., INC.
OCEANSIDE, CALIFORNIA

SPECIFICATION CONTROL, VCXO, 14DIP/4

SIZE	CAGE CODE	DWG NO	REV
A	54331	7663	D

SCALE 2/1 | CAD FILE S6720D01.A13 | SHEET 1of 4

1.0 MONITOR PART NUMBER *6720-XX*

2.0 CLASSIFICATION *OSCILLATOR, CRYSTAL, VOLTAGE CONTROL*

3.0 ELECTRICAL CHARACTERISTICS (NOTE 1)

- 3.1 NOMINAL FREQUENCY *CHART 1*
  - 3.1.1 CALIBRATION TOLERANCE *±25 PPM AT +25°C WITH VC=+2.50VDC ±0.05 VDC*
  - 3.1.2 ADJUSTMENT RANGE
    - 3.1.2.1 ADJUSTMENT RESOLUTION
  - 3.1.3 STABILITY
    - 3.1.3.1 FREQUENCY vs AMBIENT *±50PPM / -40°C TO +70°C*
    - 3.1.3.2 FREQUENCY vs VOLTAGE *BETTER THAN 1 PPM FOR A 5% CHANGE*
    - 3.1.3.3 FREQUENCY vs LOAD *2 x 10E-7 MAX FROM NO LOAD TO 15pF*
    - 3.1.3.4 FREQUENCY vs TIME
      - 3.1.3.4.1 SHORT TERM *1 x 10E-9 / 100 mSEC MAX*
      - 3.1.3.4.2 LONG TERM *30 PPM MAX OVER 10 YEARS*
      - 3.1.3.4.3 PHASE JITTER *LESS THAN 1.0 nSEC*
      - 3.1.3.4.4 WARM UP TIME *10 SEC MAX*
- 3.2 WAVE FORM *HCMOS*
  - 3.2.1 SYMMETRY/THD *45/55% AT +2.50 VDC*
  - 3.2.2 AMPLITUDE *LOGIC "0" = +0.5 V MAX / LOGIC "1" = 4.5 V MIN*
  - 3.2.3 RISE/FALL TIME *4 nSEC TYP / 6 nSEC MAX*
  - 3.2.4 LOAD *15pF*
- 3.3 VCXO TRANSFER CHARACTERISTICS
  - 3.3.1 TOTAL FREQUENCY CHANGE *±100 PPM MIN*
  - 3.3.2 CONTROL VOLTAGE RANGE *+0.50 VDC TO +4.50 VDC*
  - 3.3.3 TRANSFER COEFFICIENT and SENSE *POSITIVE*
  - 3.3.4 LINEARITY *±20%*
  - 3.3.5 MODULATION RATE/RESPONSE *10kHz MAX*
- 3.4 POWER INPUT
  - 3.4.1 OSCILLATOR VOLTAGE/CURRENT *+5.00 VDC ±5% / 35mA*

4.0 ENVIRONMENTAL

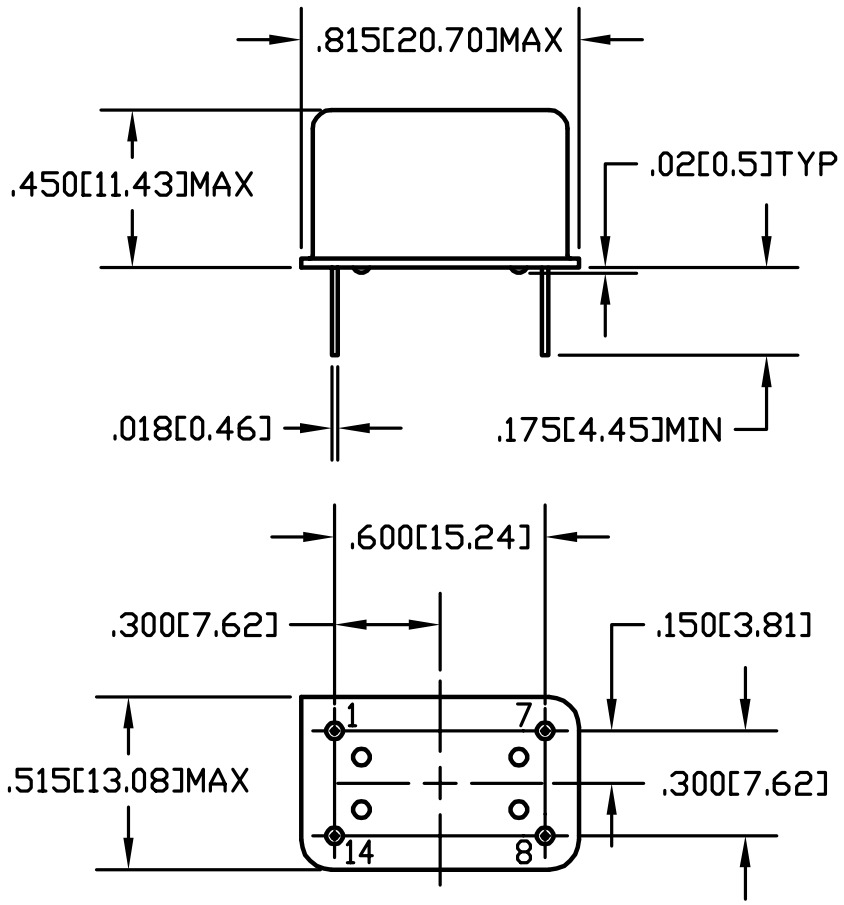
- 4.1 AMBIENT TEMPERATURE RANGE
  - 4.1.1 OPERATING *-40°C TO +70°C*
  - 4.1.2 STORAGE *-55°C TO +125°C*
- 4.2 VIBRATION *10-55 Hz 0.060 DA 55Hz - 2000Hz 20G's*
- 4.3 SHOCK *1000G's 0.35mSEC 1/2 SINE 3 SHOCKS EACH PLANE*
- 4.4 HUMIDITY *85% RH AT 85°C 1000 HOURS*
- 4.5 OTHER

NOTE 1 - ALL PERFORMANCE FIGURES ARE MEASURED UNDER THE FOLLOWING TEST CONDITION
A. AMBIENT TEMP. +25°C±5°C EXCEPT PARA 3.1.3.1
B. INPUT VOLTAGES: NOMINAL ±1% EXCEPT PARA 3.1.3.2.

CHART 1					
DASH NO.	FREQUENCY (MHz)	DASH NO.	FREQUENCY (MHz)	DASH NO.	FREQUENCY (MHz)
−01	10.000000	−21	24.704000	−41	
−02	12.352000	−22	64.512000	−42	
−03	14.318180	−23	20.456000	−43	
−04	16.128000	−24	24.545400	−44	
−05	20.000000	−25	27.000000	−45	
−06	24.000000	−26	29.500000	−46	
−07	33.333333	−27	51.843200	−47	
−08	40.000000	−28	16.384000	−48	
−09	48.000000	−29	25.920000	−49	
−10	50.000000	−30	8.192000	−50	
−11	51.840000	−31	19.440000	−51	
−12	57.600000	−32	32.768000	−52	
−13	63.488000	−33	38.880000	−53	
−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		−58	
−19	18.432000	−39		−59	
−20	30.000000	−40		−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



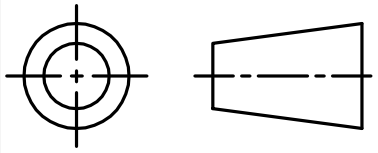
5.0 MECHANICAL

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*

THIRD ANGLE PROJECTION



SIZE	CAGE CODE	DWG NO	REV
A	54331	7663	D

SCALE 2/1	CAD FILE S6720D04.A13	SHEET 4 of 4