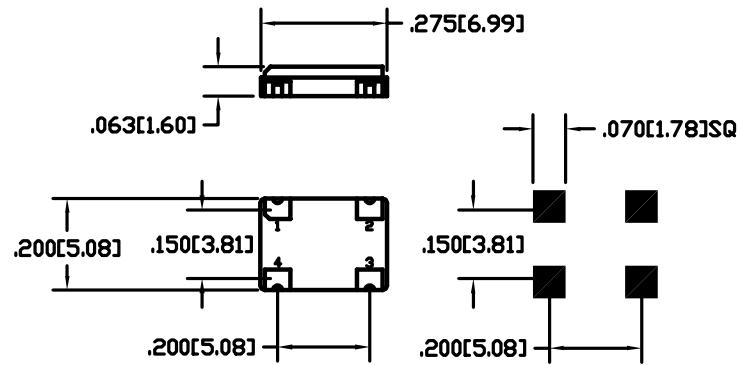


REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
L	REVISED FREQ TABLE	5/5/99	AWB

DUPLICATE DRAWING
DO NOT REVISE

- 1.0 MONITOR PART NUMBER 4184-XX
- 2.0 CLASSIFICATION HYBRID OSCILLATORS, HCMOS, TRI-STATE
- 3.0 ELECTRICAL CHARACTERISTICS (NOTE 1)
- 3.1 NOMINAL FREQUENCY SEE TABLE 1 SHEET 2
- 3.1.1 CALIBRATION TOLERANCE INCLUDED IN 3.1.3.1
- 3.1.2 ADJUSTMENT RANGE N/A
- 3.1.2.1 ADJUSTMENT RESOLUTION N/A
- 3.1.3 STABILITY
- 3.1.3.1 FREQUENCY vs AMBIENT ±50 PPM FROM -40°C TO +85°C
- 3.1.3.2 FREQUENCY vs VOLTAGE ±2PPM FOR 10% CHANGE IN VCC
- 3.1.3.3 FREQUENCY vs LOAD ±1PPM FOR 20% CHANGE IN LOAD
- 3.1.3.4 FREQUENCY vs TIME
- 3.1.3.4.1 SHORT TERM N/A
- 3.1.3.4.2 LONG TERM ±5PPM / 30 DAYS AT 70°C PER MIL-0-55310
- 3.1.3.4.3 PHASE JITTER N/A
- 3.1.3.4.4 WARM UP TIME 90% OF OUTPUT AMPLITUDE WITHIN 10mSEC
- 3.2 WAVE FORM HCMOS COMPATIBLE
- 3.2.1 SYMMETRY/THD 45/55 PERCENT OR BETTER
- 3.2.2 AMPLITUDE LOGIC 1.1VCC-0.5V MIN ; LOGIC 10%0.5V MAX
- 3.2.3 RISE/FALL TIME 10% OF THE TIME PERIOD OF THE SPECIFIED FREQUENCY
- 3.2.4 LOAD CI = 50pF MAX
- 3.3 VCC0 TRANSFER CHARACTERISTICS
- 3.3.1 TOTAL FREQUENCY CHANGE N/A
- 3.3.2 CONTROL VOLTAGE RANGE
- 3.3.3 TRANSFER COEFFICIENT and SENSE
- 3.3.4 LINEARITY
- 3.3.5 MODULATION RATE/RESPONSE N/A
- 3.4 POWER INPUT
- 3.4.1 OSCILLATOR VOLTAGE/CURRENT +5 VDC ±10% / 35mA MAX ; 8-12 mA TYP
- 3.4.2 DVEN VOLTAGE/CURRENT N/A
- 4.0 ENVIRONMENTAL
- 4.1 AMBIENT TEMPERATURE RANGE
- 4.1.1 OPERATING -40°C TO +85°C
- 4.1.2 STORAGE -62°C TO +125°C
- 4.2 VIBRATION MIL-STD-202 METHOD 204 OPERATING AND NON OPERATING
- 4.3 SHOCK MIL-STD-202 METHOD 213 TEST COND E
- 4.4 HUMIDITY 85% RH 85°C 48 HOURS
- 4.5 OTHER LEAK RATE 2X10⁻⁸ CC/HELIUM
- 5.0 MECHANICAL
- 5.1 MATERIAL/FINISH CERAMIC, GLASS SEAL, SOLDER DIPPED PADS
- 5.2 PIN CONNECTION
- | | | | | |
|---|----------------|---|----|----|
| 1 | ENABLE/DISABLE | 5 | 9 | 13 |
| 2 | GROUND | 6 | 10 | 14 |
| 3 | OUTPUT | 7 | 11 | 15 |
| 4 | +5VDC | 8 | 12 | 16 |



DIMENSIONS IN BRACKETS ARE METRIC

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

- A. AMBIENT TEMP. +25 ±5C EXCEPT PARA 3.1.3.1.
B. INPUT VOLTAGES: NOMINAL ±1% EXCEPT PARA 3.1.3.2.

FINAL	4184-XX		
NEXT ASSY	USED ON		
APPLICATION		DO NOT SCALE DRAWING	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ARE
FRACTIONS DECIMALS ANGLES
32/64 .001 .005 .010 .015 .030 .050

CONTRACT NO.	
APPROVALS	DATE
DRAWN AWB	9/15/92
CHECK LB	9/16/92
ISSUE MSA	7/16/92

MONITOR PRODUCTS CO., INC. OCEANSIDE, CALIFORNIA			
SPECIFICATION CONTROL, OSC, HCMOS, TRI-STATE			
SIZE	GAGE NO	DWG NO	REV
B	54331	14659	L
SCALE: 4/1	FILE SP4184L1.ACD	SHEET 1 of 2	

DRW EN
14659

REV
L

DASH NO.	FREQUENCY IN MHz	DASH NO.	FREQUENCY IN MHz	DASH NO.	FREQUENCY IN MHz	DASH NO.	FREQUENCY IN MHz
-01	1.843200	-31	39.321600	-61	66.000000	-91	
-02	4.000000	-32	39.398400	-62	45.000000	-92	
-03	4.354500	-33	40.000000	-63	37.632000	-93	
-04	7.108000	-34	40.550400	-64	37.056000	-94	
-05	7.200000	-35	41.472000	-65	2.048000	-95	
-06	8.000000	-36	43.243200	-66	2.000000	-96	
-07	9.830400	-37	44.000000	-67	65.000000	-97	
-08	10.000000	-38	48.000000	-68		-98	
-09	12.000000	-39	48.152000	-69		-99	
-10	14.318180	-40	11.059200	-70		-100	
-11	16.000000	-41	57.600000	-71		-101	
-12	17.734476	-42	64.000000	-72		-102	
-13	18.000000	-43	22.500000	-73		-103	
-14	18.432000	-44	66.666666	-74		-104	
-15	19.660800	-45	20.000000	-75		-105	
-16	5.000000	-46	24.576000	-76		-106	
-17	20.736000	-47	20.160000	-77		-107	
-18	23.587000	-48	7.372800	-78		-108	
-19	24.000000	-49	3.686400	-79		-109	
-20	25.000000	-50	50.000000	-80		-110	
-21	25.175000	-51	12.288000	-81		-111	
-22	25.426500	-52	60.000000	-82		-112	
-23	28.322000	-53	19.440000	-83		-113	
-24	28.375000	-54	27.000000	-84		-114	
-25	28.636360	-55	16.384000	-85		-115	
-26	30.000000	-56	28.000000	-86		-116	
-27	32.000000	-57	44.900000	-87		-117	
-28	33.333333	-58	80.000000	-88		-118	
-29	36.000000	-59	40.608000	-89		-119	
-30	36.864000	-60	33.000000	-90		-120	

TABLE 1

DWG NO.
 14659
 SH
 2
 REV
 L

		SIZE	CAGE NO.	DWG NO.	REV
DRAWN	AWB	9/15/92	B	54331	14659
ISSUED	MSA	7/16/92	SCALE	4/1	FILE: SP4184L2.A13
				SHEET	2 of 2