

- 1.0 MONITOR PART NUMBER 7513-01
- 2.0 CLASSIFICATION OSCILLATOR, CRYSTAL, TEMPERATURE COMPENSATED, VOLTAGE CONTROLLED
- 3.0 ELECTRICAL CHARACTERISTICS (NOTE 1)
- 3.1 NOMINAL FREQUENCY 50.000 MHz
- 3.1.1 CALIBRATION TOLERANCE \_\_\_\_\_
- 3.1.2 STABILITY
- 3.1.2.1 FREQUENCY vs AMBIENT  $\pm 0.5 \times 10E-6$  /  $-40^{\circ}\text{C}$  TO  $+70^{\circ}\text{C}$  WITH  $+2.5$  VDC ON PIN
- 3.1.2.2 FREQUENCY vs SUPPLY VOLTAGE  $2.0 \times 10E-7$  / VOLT
- 3.1.2.3 FREQUENCY vs LOAD  $5.0 \times 10E-6$
- 3.1.2.4 FREQUENCY vs TIME
- 3.1.2.4.1 AGING PER DAY  $5.0 \times 10E-9$
- 3.1.2.4.2 AGING PER YEAR  $5 \times 10E-7$
- 3.1.2.4.3 WARM UP TIME 3 MIN TO WITH  $1.0 \times 10E-7$
- 3.1.2.5 PHASE NOISE
- |       |               |
|-------|---------------|
| 10Hz  | -70dBc / Hz   |
| 100Hz | -90 dBc / Hz  |
| 1K    | -130 dBc / Hz |
| 10K   | -145 dBc / Hz |
| 100K  | -150 dBc / HZ |
- 3.2 WAVE FORM SINE WAVE
- 3.2.1 AMPLITUDE +3 dBm TO +8 dBm
- 3.2.2 SPURIOUS -80 dBc
- 3.2.3 HARMONICS -15 dBc
- 3.2.4 LOAD 50 OHM  $\pm 5\%$
- 3.3 CONTROL VOLTAGE CHARACTERISTICS
- 3.3.1 FREQUENCY CHANGE  $\pm 5.0 \times 10E-6$  MIN /  $\pm 1.5 \times 10E-5$  MAX
- 3.3.2 CONTROL VOLTAGE RANGE .5 TO 4.5 V / 2.5 V NOM (MUST SURVIVE 0 TO +12 VDC INPUT)
- 3.3.3 TRANSFER COEFFICIENT and SENSE POSITIVE
- 3.3.4 LINEARITY 35%
- 3.4 POWER INPUT
- 3.4.1 VOLTAGE +12 VDC  $\pm 5\%$
- 3.4.2 CURRENT
- 3.4.2.1 CONTINUOUS 0.7 WATTS
- 3.4.2.2 WARM UP 2.5 WATTS
- 4.0 ENVIRONMENTAL
- 4.1 AMBIENT TEMPERATURE RANGE
- 4.1.1 OPERATING  $-40^{\circ}\text{C}$  TO  $+70^{\circ}\text{C}$
- 4.1.2 STORAGE \_\_\_\_\_
- 4.2 VIBRATION \_\_\_\_\_
- 4.3 SHOCK \_\_\_\_\_
- 4.4 HUMIDITY \_\_\_\_\_
- 4.5 OTHER \_\_\_\_\_

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

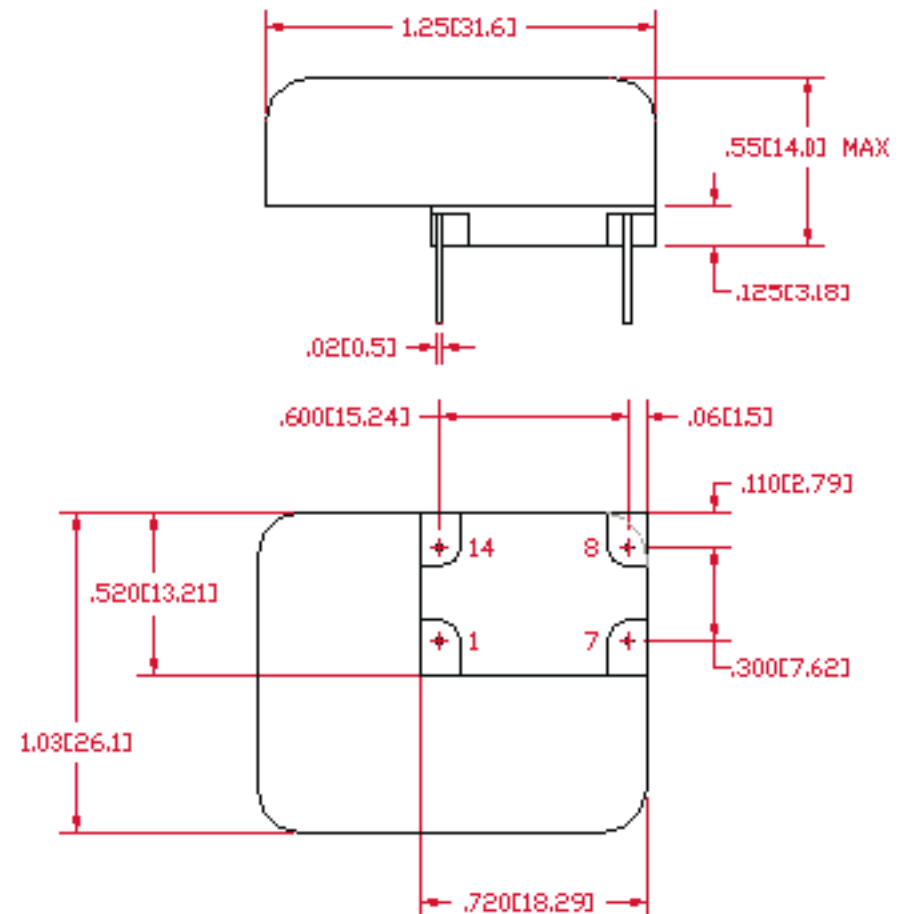
A. AMBIENT TEMP.  $+25^{\circ}\text{C} \pm 5^{\circ}\text{C}$  EXCEPT PARA 3.1.3.1

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

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

7513-01



5.0 MECHANICAL

- 5.1 MATERIAL/FINISH CRS / BRIGHT NICKEL PER QQ-N-290 TYPE II
- 5.2 PIN CONNECTION
1. ELECT TUNING INPUT
  7. CASE GROUND
  8. OUTPUT
  14. +12 VDC



502 Via del Monte, Oceanside, CA 92054  
Tel: 760 433-4510 Fax: 434-0255