1.0 MONITOR PART NUMBER 1284-01

2.0 CLASSIFICATION OSCILLATOR, CRYSTAL, OVEN CONTROLLED

3.0 ELECTRICAL CHARACTERISTICS (NOTE 1)

3.1 NOMINAL FREQUENCY 10.000 MHz
3.1.1 CALIBRATION TOLERANCE 2 X 10E-9
3.1.2 ADJUSTMENT RANGE ±1 PPM TYP
3.1.2.1 ADJUSTMENT RESOLUTION <1 X 10E-9
3.1.3 STABILITY
3.1.3.1 FREQUENCY vs AMBIENT ±2 x 10E-9 AT TIME OF SHIPMENT
3.1.3.2 FREQUENCY vs VOLTAGE ± 1 X 10-10 MAX PER PERCENT ON EITHER SUPPLY
3.1.3.3 FREQUENCY vs LOAD ± 1 X 10E-10 MAX PER HCTTL LOAD
3.1.3.4 FREQUENCY vs TIME
3.1.3.4.1 SHORT TERM ± 3 X 10E-10 / DAY MAX
3.1.3.4.2 LONG TERM ± 5 X 10E-8 / YR MAX
3.1.3.4.3 ALLAN VARIANCE 9 X 10E-12 TYP FOR A 1 SECOND GATE TIME
3.1.3.4.4 WARM UP TIME 100 X 10E-9 IN 7 MIN, 10 X 10E-9 IN 10 MIN
5 X 10E-9 IN 20 MIN

3.2 WAVE FORM HCTTL
3.2.1 SYMMETRY/THD 45/55%
3.2.2 AMPLITUDE LOGIC "0" = .2 V MAX , LOGIC "1" = V_{DD} -.3V MIN
3.2.3 RISE/FALL TIME 15nSEC
3.2.4 LOAD 1 TO 10 HCMOS TTL LOADS
3.3 POWER INPUT
3.3.1 OSCILLATOR VOLTAGE/CURRENT COLD: 15V±5% / 850mA MAX
5V±10% / 20mA MAX
3.3.2 OSCILLATOR VOLTAGE/CURRENT WARM: 15V±5% / 250mA TYP AT 25°C
5V±10% / 15mA TYP

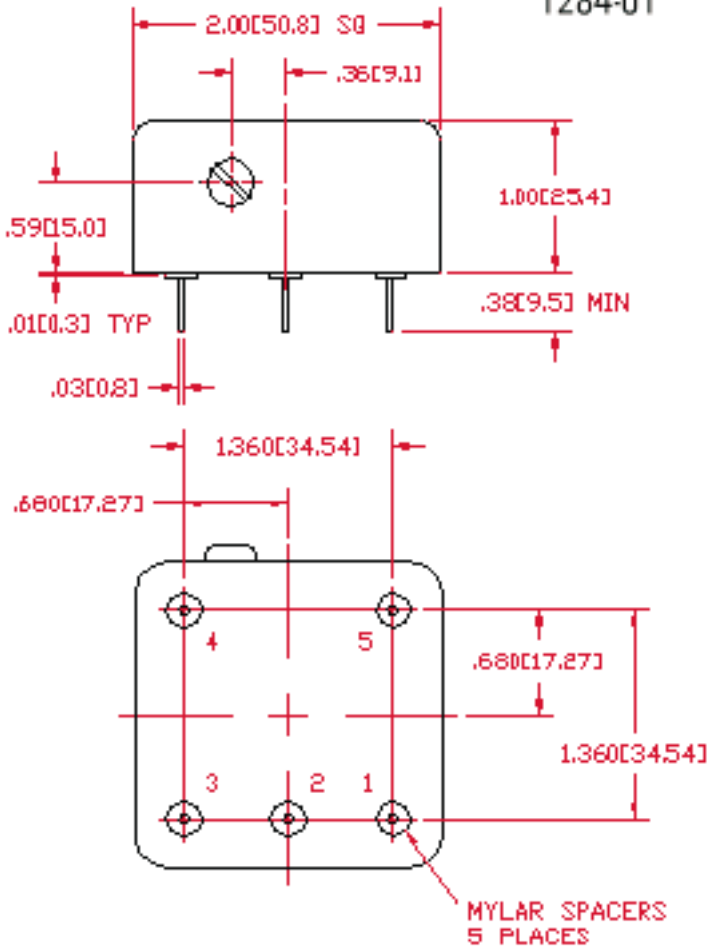
3.4 WARM UP INDICATOR
3.4.1. COLD: 10 mA SINK / .5 VDC MAX
3.4.2. HOT: OPEN COLLECTOR

4.0 ENVIRONMENTAL
4.1 AMBIENT TEMPERATURE RANGE
4.1.1 OPERATING 0°C TO +50°C
4.1.2 STORAGE -45°C TO +85°C
4.2 VIBRATION MIL-STD 202, METH 201 AND 204 COND A, 5G TO 500Hz
ONE SWEEP PER AXIS
4.3 SHOCK 30G, 11mS PER MIL-STD-202, METHOD 214 CONDITION J
4.4 HUMIDITY O-RING SEAL PER MIL-O-55310
4.5 OTHER

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.

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

1284-01



5.0 MECHANICAL
5.1 MATERIAL/FINISH CRS / BRIGHT NICKEL PER
5.2 PIN CONNECTION QQ-N-290 TYPE II
1. WARM INDICATOR
2. +5 VDC
3. RF OUTPUT
4. GROUND
5. +15 VDC

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