

- 1.0 MONITOR PART NUMBER 1287-01
- 2.0 CLASSIFICATION OSCILLATOR, CRYSTAL, OVEN CONTROLLED, ELECT TRIM
- 3.0 ELECTRICAL CHARACTERISTICS (NOTE 1)
- 3.1 NOMINAL FREQUENCY 10,000 MHz
- 3.1.1 FREQUENCY ADJUSTMENT ± 0.3 PPM TO ± 0.5 PPM FOR A 0-10V INPUT
- 3.1.2 STABILITY
- 3.1.2.1 FREQUENCY vs AMBIENT LESS THAN $\pm 2 \times 10E-9$ / 0°C TO $+75^{\circ}\text{C}$
LESS THAN $\pm 1 \times 10E-9$ / -30°C TO $+75^{\circ}\text{C}$
- 3.1.2.2 FREQUENCY vs VOLTAGE LESS THAN $\pm 1 \times 10E-9$ FOR A 10% CHANGE IN SUPPLY
- 3.1.2.3 FREQUENCY vs LOAD LESS THAN $\pm 11 \times 10E-9$ FOR A $\pm 10\%$ CHANGE IN LOAD
- 3.1.2.4 TIME DOMAIN
- 3.1.2.4.1 SHORT TERM ALLAN VARIANCE LESS THAN $1 \times 10E-11$ FOR 1 SEC GATE TIME
- 3.1.2.5 FREQUENCY vs TIME
- 3.1.2.5.1 MEDIUM TERM $5 \times 10E-8$ FOR FIRST YEAR
- 3.1.2.5.2 LONG TERM $3 \times 10E-7$ FOR 10 YEARS
- 3.1.2.5.3 RETRACE REFERENCE TO TURN OFF FREQUENCY, WITHIN $\pm 1 \times 10E-8$ AFTER
60 MINUTES WARM UP FOLLOWING 24 HOURS OFF TIME AT $+25^{\circ}\text{C}$
- 3.1.2.5.4 WARM UP TIME LESS THAN 15 MINUTES FROM $+25^{\circ}\text{C}$ FOR FREQUENCY ACCURACY
TO BE WITHIN $\pm 1 \times 10E-7$ OF PRIOR FREQUENCY AFTER 24HRS
OFF TIME
- 3.1.3 PHASE NOISE (SINGLE SIDE BAND, 1 Hz BW)
- | | |
|--------|---------|
| 1 Hz | 85 dBc |
| 10 Hz | 115 dBc |
| 100 Hz | 131 dBc |
| 1 kHz | 140 dBc |
| 10 kHz | 151 dBc |
- 3.1.4 TRIM CHARACTERISTICS 0.05 TO 0.12PPM/V TYP FOR 0 TO $+10.0$ VDC IN POSITIVE TUNING
SENSE CENTERED AT $+5.0$ VDC
- 3.2 WAVE FORM SINE WAVE
- 3.2.1 SYMMETRY/THD _____
- 3.2.2 AMPLITUDE 7 dBm ± 2 dBm
- 3.2.3 LOAD 50 OHMS
- 3.3 POWER INPUT
- 3.3.1 SUPPLY VOLTAGE $+1.2$ VDC $\pm 10\%$
- 3.3.2 SUPPLY CURRENT
- 3.3.2.1 WARM UP 800 mA MAX
- 3.3.2.2 AFTER WARM UP LESS THAN 1.5 WATTS AT $+25^{\circ}\text{C}$
- 4.0 ENVIRONMENTAL
- 4.1 AMBIENT TEMPERATURE RANGE
- 4.1.1 OPERABLE -30°C TO $+75^{\circ}\text{C}$
- 4.1.2 STORAGE -55°C TO $+85^{\circ}\text{C}$
- 4.2 VIBRATION MIL-STD-202F, METH 2040, TEST COND D, 20G PEAK, 10 TO 2000 Hz
- 4.3 SHOCK MIL-STD-202B, METH 213B, TEST COND C, 100G's, 6mSEC
- 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.

