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OVENIZED CRYSTAL OSCILLATORS TRACK AND HOLD OSCILLATOR

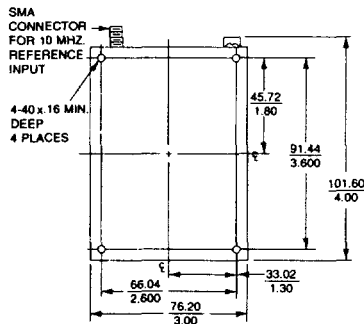
JKXO-137

Track Mode: The oscillator output frequency will track an externally supplied reference frequency to within $\pm 1 \times 10^{-4}$ accuracy for 20 years of operation.

SPECIFICATIONS

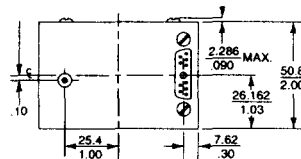
OUTPUT FREQUENCY: 10 MHz.
 OPERATING TEMPERATURE RANGE: 0°C to 60°C.
 RF OUTPUT: Square wave, 0.8 volt maximum "0" level, +3.5 volt minimum "1" level when driving 50 ohms to ground.
 SPURIOUS OUTPUTS: -60dbc maximum
 OUTPUT SYMMETRY: 40% to 60% duty cycle (50% nominal)
 WARM-UP TIME TO ACQUIRE TRACKING: 20 minutes maximum

Hold Mode Operation: The oscillator will hold its frequency setting after switching to hold mode as long as power is not interrupted. The oscillator will remain within the following accuracy for 2 months due to aging, temperature and input voltage variations. (External reference frequency within $\pm 10^{-4}$ of 10 MHz at switch over, and will be removed after switch over.)



SPECIFICATIONS

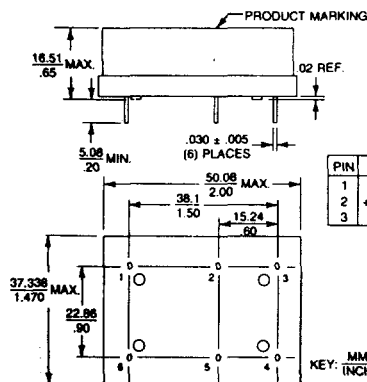
STABILITY: 10 MHz $\pm 10 \times 10^{-4}/2$ months (After 1 hour)
 SHORT TERM STABILITY:
 ALLEN VARIANCE: 1×10^{-10} RMS maximum for 1 second gate times.
 SINGLE SIDEBAND PHASE NOISE (1 HZ BW): -70 dbc at 1 Hz offset;
 -100 dbc at 100 Hz offset;
 -130 dbc at 1 KHz offset
 MONITOR OUTPUT: The oscillator has a self test circuit that monitors the oven temperature, internal reference voltage, output signal level and phase lock. The output levels are HC logic compatible.
 INPUT POWER SUPPLY: + 19VDC to + 30VDC (24 VDC nominal) with 1 amp maximum at turn on and 0.5 amp maximum at steady state.



dbt

OVENIZED CRYSTAL OSCILLATORS STRATUM III AND SONET—LOW PROFILE OCVCXO

JKXO-150



PIN	FUNCTION	PIN	FUNCTION
1	GND (OVEN)	4	GND (OSC)
2	+5VDC (OVEN)	5	+5VDC (OVEN)
3	FREQ. OUT	6	VOLT CONTROL

SPECIFICATIONS

FREQUENCY RANGE: 25.0-75.0 Mhz Standard
 INPUT VOLTAGE: +5.0 VDC $\pm 5\%$
 INPUT POWER: 3 W Maximum at turn on + 1W typical at room temperature
 FREQUENCY STABILITY:
 Vs. Temperature ± 0.37 PPM 0° C to 70° C
 Vs. Time $\pm 5 \times 10^{-4}$ +/- Day After 30
 OUTPUT:
 Level: 0 dbm to +5 dbm into 50 ohms
 Harmonics -30 dbc max
 Nonharmonics -60 dbc max
 DEVIATION ± 10.0 PPM minimum
 SLOPE 2PPM/Volt
 CONTROL VOLTAGE: 0 to ± 10 VDC
 LINEARITY: $\pm 5\%$ Monotonic
 SHORT TERM STABILITY $< 5 \times 10^{-10}$ Allan Variance for 1 sec.
 SHOCK 100 Gs. 6 ms.
 VIBRATION 10 Gs. 10-500 Hz