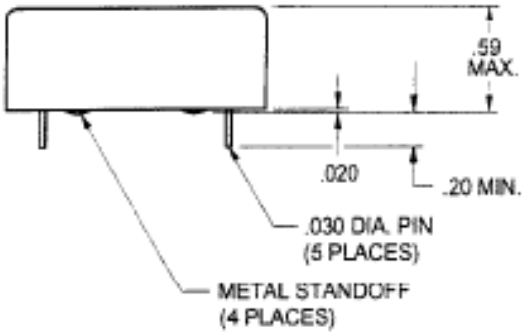
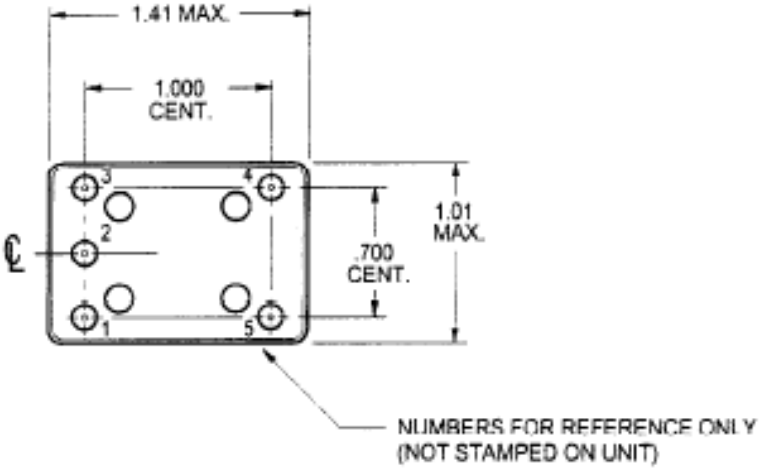
PIN CONNECTIONS	
PIN	FUNCTION
1 (See Note 1)	VCO INPUT or NOT CONNECTED
2 (See Note 1)	REFERENCE VOLTAGE or NOT CONNECTED
3	+VDC
4	R. F. OUTPUT
5	0 VOLTS & CASE



Note 1. If the specification does not specify parameters for either PIN1 or PIN2 then that respective PIN is NOT internally CONNECTED.



1. OUTPUT	
1.1. Frequency	10.000 MHz
1.2. Waveform	Sine wave
1.3. Level	+8 ±2 dBm
1.4. Load	50 Ω
1.5. Harmonics	< -30 dBc
1.6. Spurious	< -60 dBc
2. FREQUENCY STABILITY	
2.1. Ambient	< $\pm 2 \times 10^{-8}$ from 0°C to +70°C (referenced to +25°C)
2.2. Aging	
a. At time of shipment	< $\pm 1 \times 10^{-9}$/day
b. After indefinite storage	
i. Daily	< $\pm 1 \times 10^{-9}$ after 30 days
ii. Yearly	< $\pm 1 \times 10^{-7}$
iii. 10 years	< $\pm 3.5 \times 10^{-7}$
2.3. Voltage	< $\pm 5 \times 10^{-9}$/±5% change
2.4. Load	< $\pm 5 \times 10^{-9}$/±5% change
2.5. Warm-up	< $\pm 2 \times 10^{-8}$ in 5 minutes @ +25°C (referenced to 4 hours)
2.6. Phase noise	
a. @ 10 Hz	< -115 dBc
b. @ 100 Hz	< -135 dBc
c. @ 1 kHz	< -145 dBc
2.7. Acceleration sensitivity	< TBD$\times 10^{-9}$/g per axis
3. ELECTRICAL FREQUENCY ADJUSTMENT (PIN = "VCO INPUT")	
3.1. Range	> $\pm 4 \times 10^{-7}$ < $\pm 9 \times 10^{-7}$ (At time of shipment) (Referenced to nominal frequency)
3.2. Control	0 VDC to Vref (+8 VDC) or a 20 kΩ potentiometer connected between the "REFERENCE VOLTAGE" pin and "0 VOLTS & CASE" pin with wiper connected to "VCO INPUT" pin.
3.3. Slope	Positive
3.4. Center	+4 VDC ±0.8 VDC (control voltage at which nominal frequency occurs at time of shipment)
3.5. Linearity	< ±10%
3.6. Input impedance	> 50 kΩ

4.	INPUT POWER (PIN = "+VDC")	
	4.1. Voltage	+13.75 ±2.25 VDC
	4.2. Current	< 350 mA @ turn on
	4.3. Steady state	< 1.3 Watts @ +25°C
5.	REFERENCE VOLTAGE (PIN = "REFERENCE VOLTAGE"), an output	
	5.1. Voltage	+8 VDC ±5%
	5.2. Load	> 8 kΩ
	5.3. Temperature stability	< ±0.015 VDC (Over temperature range in 2.1.)
6.	ENVIRONMENTAL	
	6.1. Humidity	MIL-STD-202F, Method 103B, Test Condition A (95% R.H. @ +40°C, non-condensing, 96 hours)
	6.2. Storage temperature	-40°C to +85°C
	6.3. Vibration (non-operating)	MIL-STD-202F Method 201A. (0.06" Total p-p, 10 to 55 Hz)
	6.4. Shock (non-operating)	MIL-STD-202F, Method 213B, Test Condition J. (30 g, 11 ms half-sine)
7.	MECHANICAL	
	7.1. Applicable series	OCXO 131 series
	7.2. Model number	OCXO 131-55
	7.3. Outline drawing	125-535

ISOTEMP RESEARCH INC. CHARLOTTESVILLE, VA. USA 22903	CODE ID.	PART NO.
	31785	OCXO 131-55

TEL 804-295-3101