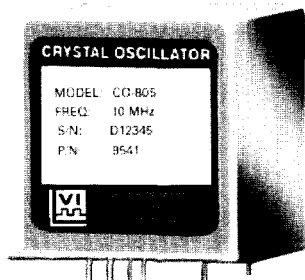


Evacuated Miniature Crystal Oscillators (EMXO™)

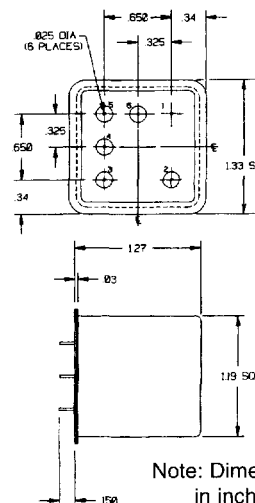
CO-805 Series



Features

- 10 MHz Standard
- Low Power Consumption
- Small Size: 1.33" x 1.33" x 1.27"
- Ruggedized Construction
- High Temperature Stability
- Superior Aging Characteristics
- Fast warm-up

By utilizing a vacuum sealed enclosure with unique oscillator packaging, the Vectron EMXO represents the highest performance available for low power and fast warm-up applications. Please contact factory for other available options.



Note: Dimensions in inches

SPECIFICATIONS

Output Frequency	10.00 MHz (other frequencies optional)	
Output Level	+7.0 dBm sine minimum into 50Ω Option J: HCMOS/TTL output (additional +5 Vdc required)	
Voltage Control	0 to +5 Vdc	
Voltage Control Range	$\pm 5 \times 10^{-7}$, positive transfer function	
Allan Variance	5×10^{-12} 0.1 sec to 10 sec	
Aging	5×10^{-10} /day; 5×10^{-8} /year	
SSB Phase Noise/Hz	<u>SINE</u>	<u>TTL</u>
100 Hz	-140 dBc	-140 dBc
1 kHz	-150 dBc	-145 dBc
10 kHz	-150 dBc	-145 dBc
Acceleration Sensitivity (worst case axis)	1.5×10^{-9} /G	
Harmonic Distortion	-30 dBc	
Input Voltage Range		
Oscillator:	+12 Vdc $\pm 5\%$ (other supply voltages available)	
Oven:	+11 Vdc to +15 Vdc	
Power, Steady State (max.)		
-55°C:	1 Watt	
0°C:	0.75 Watt	
+25°C:	0.60 Watt	
Warm-up Power	6 Watts maximum	
Frequency Retrace @ +25°C (24 hours off)	$\pm 1 \times 10^{-8}$ after one hour on	
Warm-up Time from -55°C	2 minutes to 1×10^{-7} reference to 30 minutes 4 minutes to 1×10^{-8} reference to 30 minutes	
Temperature Stability		
(Temperature Range "B")	0°C to +50°C: B58 = $\pm 5 \times 10^{-8}$ B29 = $\pm 2 \times 10^{-9}$	
(Temperature Range "C")	0°C to +70°C: C59 = $\pm 5 \times 10^{-9}$	
(Temperature Range "G")	-55°C to +75°C: G18 = $\pm 1 \times 10^{-8}$	
(Temperature Range "F")	-55°C to +85°C: F18 = $\pm 1 \times 10^{-8}$	
Size	1.33" x 1.33" x 1.27" (1" ht available on special order)	