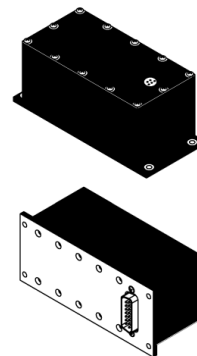




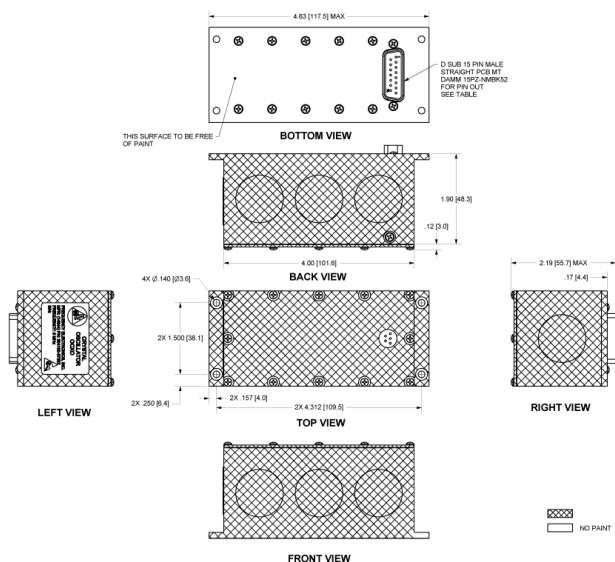
Model FE-2026 Series

5MHz/10MHz HIGH PERFORMING VOLTAGE
CONTROLLED CRYSTAL OSCILLATOR (VCXO)
WITH VERY LOW PHASE NOISE AND
EXCELLENT SHORT-TERM AND
TEMPERATURE FREQUENCY STABILITY



PARAMETER		UNIT
Output Frequency (Sine Wave)	5.0	MHz
Amplitude Into 50 ohms	+5±0.5	dBm
Aging	±5x10 ⁻¹¹	/Day
Short Term Stability (ADEV)		
$\tau = 1$ sec	≤ 1.0E-12	
10 < τ < 100 sec	≤ 5.0E-13	
$\tau = 1000$ sec	≤ 1.0E-12	
Phase Noise @ 5 MHz (Static):		
@ 1 Hz offset	≤ -115	dBc/Hz
@ 10 Hz offset	≤ -135	dBc/Hz
@ 100 Hz offset	≤ -145	dBc/Hz
> 1000 Hz offset	≤ -155	dBc/Hz
Spurs		
Non-Harmonic	≤ -80	dBc
Sub-Harmonic	≤ -50	dBc
Harmonics	≤ -40	dBc
Vacuum Retrace (On 24hrs-Off 48hrs-On)	≤ ±4.0E-9	

PARAMETER		UNIT
Tuning Voltage	1 to 8	V
Temperature Ranges (at Baseplate):		
Freq Stability Temp (any 3°C window)	+6 to +31	°C
Operating Temperature	-30 to +70	°C
Storage Temperature Range	-40 to +95	°C
Frequency Stability vs. Temperature		
+6°C to +31°C (any 3°C window)	4.0E-11	/°C
Input Voltage:	+12.5	Vdc
Warm-up Power	8	W
Warm-up Time to 1.0E-10 @ 25 °C	≤ 15	min
Steady State Power (@ 30°C)	4	W
Steady State Power (@ -30°C)	6	W
Frequency Stability vs. Input Voltage	< 8.0E-12	/V
Magnetic Field (≤ 5 Gauss DC Mag Field)	≤ 1.0E-11	/Gauss
Dimensions: 4" x 2" x 2.5"		in
Volume	20	in ³
Weight	0.75	lbs



CONNECTOR PIN OUT TABLE	
PIN NO.	PIN FUNCTION
1	VCO IN 0 TO 8V
2	VCO RTN
3	+8V REFERENCE OUT
4	OVEN TLM OUT 0V TO 3V
5	+12.5 INPUT VOLTAGE
6	DC RTN
7	RF OUTPUT 1 +5dbm
8	RF RTN
9	FACTORY USE ONLY, NC
10	FACTORY USE ONLY, NC
11	FACTORY USE ONLY, NC
12	DC RTN
13	DC RTN
14	FACTORY USE ONLY, NC
15	RF OUTPUT 2 +5dbm

Specifications subject to change without notice

Revision: June 2021