



Crystal Oscillators > 4 to 30 MHz > Blue Tops Ultra Low Noise

Features:

- The Lowest Phase Noise
- Excellent Frequency Stability over Temperature
- Very Low Aging Rate
- Best Short Term Stability

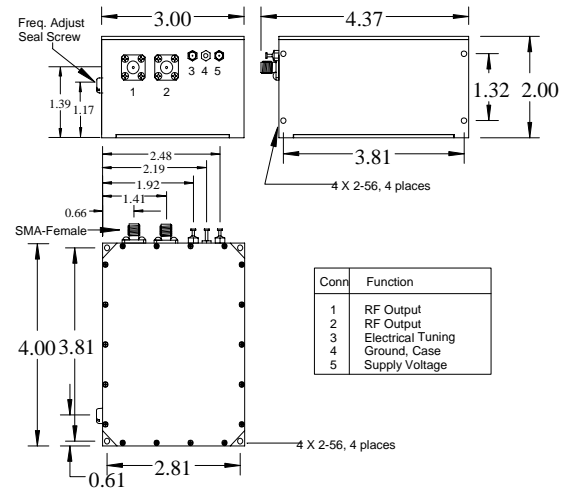
Applications:

- Reference for Phase Noise Measurements
- Synthesizers
- High Energy Physics



The new Blue Top Ultra Low Noise oscillator provides scientific instrument and timing systems with superb temperature stabilities and ultra-low phase noise. The crystal is mounted in a large thermal mass isolated on shock mounts to provide the best short-term stability and phase noise, typically better than -120 dBc at 1 Hz and -178 dBc at 10 kHz. An internal doubler is optional and 5 and 10 MHz outputs may be provided simultaneously. The unit is available with temperature stability to $\pm 5 \times 10^{-10}$ and an aging rate of 1×10^{-10} , which also makes these units among the most stable. The unit has an internal voltage regulator, which provides excellent line rejection. Please consult the factory if you need any specifications to be modified to better suit your application.

Frequency	5		10	
Output Level	+13			
Aging Per day after 30 days operating, typical	$\pm 5 \times 10^{-10}$ to 1×10^{-10} / day			
Phase Noise				
1 Hz	-115	-120	-100	-105
10 Hz	-145	-150	-130	-135
100 Hz	-165	-170	-155	-160
1 kHz	-176	-176	-170	-173
10 kHz	-176	-176	-172	-175
Temperature Stability (Specify) 0 to +60C	$\pm 1 \times 10^{-9}$			
Electrical Tuning Range (Specify)	$\pm 1 \times 10^{-6}$ to $\pm 2 \times 10^{-7}$			
Tuning A	0 to +10 VDC			
Tuning B	± 5 VDC			
Supply Voltage (Specify)	+12 or +15			
Warm-up Power	10 for 30 minutes			
Total Power typical	5 at 25°C			
Crystal Type	SC			
Dimensions	102 x 76.2 x 50.8 4 x 3 x 2			
Connectors	SMA and feedthru capacitor			



Connector numbers are for reference only. They may not appear on unit.