



Crystal Oscillators > 4 to 30 MHz > Small Fry OCXO

Features:

- Very Low Phase Noise
- Excellent Frequency Stability over Temperature
- Very Low Aging Rate
- Internal Voltage Regulator

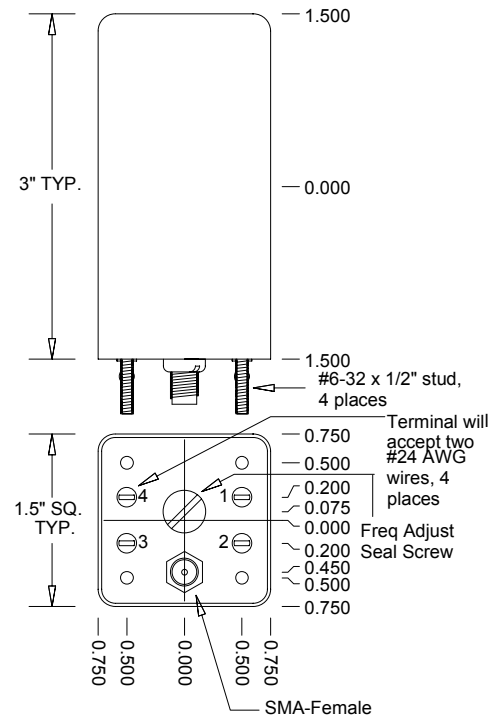
Applications:

- GPS Receivers
- Synthesizers



The Small Fry offers excellent short-term stability and very low overall noise in a small package. A vacuum flask insulator minimizes effects of short-term temperature changes, providing a stable frequency with power consumption of typically 1 watt at 25°C. Available with temperature stability of $\pm 1 \times 10^{-9}$, these oscillators are among some of the most stable crystal based references. The unit also has an internal voltage regulator, which provides excellent line rejection. Please consult factory if you need any specifications to be modified to better suit your application.

Typical Specifications:						
Frequency (Specify)	4 to 30 MHz					
Frequency	5	10	MHz			
Output Level	+13 dBm					
Aging	Per day after 30 days operating, typical	$\pm 5 \times 10^{-10}$	$\pm 1 \times 10^{-10}$	$\pm 1 \times 10^{-9}$	$\pm 5 \times 10^{-10}$	
	Per year after 90 days operating, typical	$\pm 5 \times 10^{-8}$	$\pm 2 \times 10^{-8}$	$\pm 1 \times 10^{-7}$	$\pm 1 \times 10^{-7}$	
Phase Noise 10 MHz, +13 dBm	10 Hz	-125	-140	-120	-130	dBc/Hz
	100 Hz	-145	-160	-135	-150	dBc/Hz
	1 kHz	-160	-165	-160	-168	dBc/Hz
	10 kHz	-160	-165	-165	-168	dBc/Hz
	20 kHz	-160	-165	-165	-168	dBc/Hz
Temperature Stability (Specify)	Range A	0 to +50C	$\pm 5 \times 10^{-9}$	$\pm 1 \times 10^{-9}$	$\pm 5 \times 10^{-9}$	$\pm 1 \times 10^{-9}$
	Range B	0 to +65C	$\pm 5 \times 10^{-9}$	$\pm 1 \times 10^{-9}$	$\pm 5 \times 10^{-9}$	$\pm 2 \times 10^{-9}$
	Range C	0 to +70C	$\pm 5 \times 10^{-9}$	$\pm 2 \times 10^{-9}$	$\pm 5 \times 10^{-9}$	$\pm 5 \times 10^{-9}$
	Range D	-20 to +70C	$\pm 5 \times 10^{-9}$	$\pm 2 \times 10^{-9}$	$\pm 5 \times 10^{-9}$	$\pm 5 \times 10^{-9}$
	Range E	-40 to +70C	$\pm 2 \times 10^{-8}$	$\pm 1 \times 10^{-8}$	$\pm 2 \times 10^{-8}$	$\pm 1 \times 10^{-8}$
	Range F	-55 to +85C	$\pm 2 \times 10^{-8}$	$\pm 1 \times 10^{-8}$	$\pm 2 \times 10^{-8}$	$\pm 1 \times 10^{-8}$
Spurious	-80					dBc
Harmonics	-30					dBc
Electrical Tuning Range (Specify)	Tuning A	0 to +10 VDC	$\pm 2 \times 10^{-7}$ to $\pm 2 \times 10^{-6}$			
	Tuning B	± 5 VDC				
Supply Voltage (Specify)	+12 or +15					VDC
Warm-up Power	4					Watts
Total Power typical	1.3					Watts
Crystal Type	SC					
Dimensions	38.1 x 38.1 x 76.2					mm
	1.5 x 1.5 x 3					inches
Connectors	SMA and solder pins					
OPTIONAL	Various flange mounts Stud mount					



Connector numbers are for reference only, they are not marked on unit.

PIN	FUNCTION
1	Supply Voltage
2	Ground
3	Reference Voltage Out
4	Electrical Tuning