

XO5120 Series

1.4x1 inch, TTL or Sinewave, OCXO

- Surface mount package offering both AT and SC-cut crystals
- Ideal for microwave radios (short haul), base stations and test equipment applications where size and package style (SMT) are critical.

Model XO5120	Frequency (MHz)	Temperature Range (°C)	Temperature Stability	Aging First Year	Output	Supply Voltage
SC-Cut	10	0 to +70	$\pm 1.0 \times 10^{-8}$	$\pm 1.5 \times 10^{-7}$	Sinewave/HCMOS/TTL	$5V_{DC} \pm 5\%$
AT-Cut	10	0 to +70	$\pm 5.0 \times 10^{-8}$	$\pm 2.0 \times 10^{-7}$	Sinewave/HCMOS/TTL	$5V_{DC} \pm 5\%$
Options	10 to 100	-45 to +85	Consult Factory		Sinewave/HCMOS/TTL	5-15V _{DC}

Additional Typical Specifications

	SC-Cut	AT-Cut
Daily Aging	$< \pm 5 \times 10^{-10}$	$< \pm 1 \times 10^{-9}$
Power Consumption	1.25 watts @ 25°C steady state	
Warm-up Power	4.0 watts	
Warm-up Time @ 25°C	To within $\pm 1 \times 10^{-7}$ of F_0 in 2-minutes	
Frequency Adjustment	$< \pm 2 \times 10^{-6}$	$< \pm 4 \times 10^{-6}$
Control Voltage	0-4V	
Slope	Positive	
Reference Output	3.9V	
Sine Output Level	+3dBm to +7dBm ± 3 dBm	
SSB Phase Noise at 10MHz		
1Hz	-90dBc/Hz	-80dBc/Hz
10Hz	-120dBc/Hz	-115dBc/Hz
100Hz	-140dBc/Hz	-140dBc/Hz
1kHz	-150dBc/Hz	-145dBc/Hz
10kHz	-155dBc/Hz	-150dBc/Hz

Optional Temperature Ranges and Frequency Stabilities (F/T)

OTR °C	SC-Cut	AT-Cut
0 to +50	$\pm 5 \times 10^{-9}$	$\pm 3 \times 10^{-8}$
0 to +70	$\pm 1 \times 10^{-8}$	$\pm 5 \times 10^{-8}$
-10 to +70	$\pm 2 \times 10^{-8}$	$\pm 5 \times 10^{-8}$
-30 to +70	$\pm 3 \times 10^{-8}$	$\pm 5 \times 10^{-8}$
-40 to +70	$\pm 4 \times 10^{-8}$	$\pm 8 \times 10^{-8}$
-45 to +85	$\pm 5 \times 10^{-8}$	$\pm 1 \times 10^{-7}$

Model	Crystal Cut	Output Type
XO5121	AT-Cut	Sinewave
XO5122	AT-Cut	HCMOS/TTL
XO5123	SC-Cut	Sinewave
XO5124	SC-Cut	HCMOS/TTL