

**OCXO SERIES 9400**■ **FEATURES**

**Excellent frequency stability**  
**High Frequency up to 100MHz**  
**Low Profile**

**APPLICATIONS**

**- TELECOM**  
**- BASE STATION**  
**- INSTRUMENTATION**

■ **ELECTRICAL PERFORMANCE**

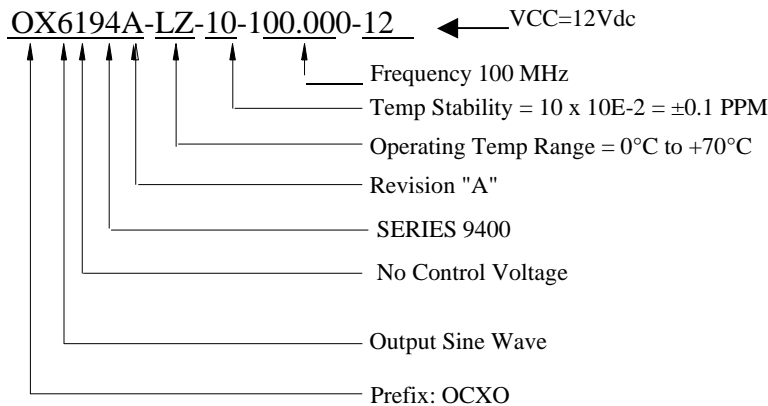
PARAMETER	OCXO SERIES 9400	
	AT CUT CRYSTAL	SC CUT CRYSTAL
Supply voltage, nom.	12V, 5V, 3.3V $\pm 5\%$ Standard	
Power dissipation steady state	2 Watt Max.	
Heat up power	5 Watt Max.	
Heat up time.	5 min Max	
Frequency range	10 To 100MHz Standard	
Frequency Adjustment: Electrical (0 to 5V) Electrical (0 to 10V)	$\pm 10$ PPM Min $\pm 15$ PPM Min	$\pm 0.7$ PPM Min $\pm 1$ PPM Min
Freq. stability vs. temperature LX: 0°C to 60°C FZ: -30°C to 70°C	$\pm 0.05$ PPM $\pm 0.15$ PPM	$\pm 0.010$ PPM $\pm 0.020$ PPM
	(Standard, contact factory for different temp ranges and stabilities)	
Freq. stability vs. supply changes	$\pm 0.01$ PPM Max for $\pm 5\%$ Change	$\pm 0.005$ PPM Max for $\pm 5\%$ Change
Freq. stability vs. load changes	$\pm 0.005$ PPM Max for $\pm 5\%$ Change	$\pm 0.002$ PPM Max for $\pm 5\%$ Change
Long term stability (Aging)	$\pm 0.5$ PPM Max for 1 Years $\pm 0.005$ PPM/Day Max.	$\pm 0.1$ PPM Max for 1 Years $\pm 0.002$ PPM/Day Max.
Output	HCMOS/TTL/Sine 0 to +10dBm	
Harmonics, Sub Harmonics	-30dBc(Sine Output)	
Spurious	-75dBc(Sine Output)	
Duty cycle	40/60% to 60/40%(HCMOS)	
Rise / fall time	10nS Max. (HCMOS, 10%~90%Vout, 90%~10%Vout)	
Short term Stability (10MHz)	1 E-10 /Sec	5 E-11 /Sec
Phase Noise typical under static conditions (Sine Output 10MHZ)	Offset      Phase Noise 10Hz      -95 dBc/Hz 100Hz      -125 dBc/Hz 1000Hz      -135 dBc/Hz 10000Hz      -150 dBc/Hz	Offset      Phase Noise 10Hz      -115 dBc/Hz 100Hz      -135 dBc/Hz 1000Hz      -145 dBc/Hz 10000Hz      -150 dBc/Hz

Note: All Typical parameters for a 10MHz output and 5V Supply, for different frequencies consult factory

## ■ PART NUMBERING SYSTEM

Prefix	Output Type	Control Voltage	Series	Revision	Temperature Range	Stability	Frequency	Supply Voltage
OX	4:LVC MOS 6:SINE	1: No Control Voltage 5: Control Voltage	94: 9400	A	First letter Lowest Temperature, Second letter Highest Temperature: From A=-55°C to Z=+70°C, Then: 1=+75°C, 2=+80°C, 3=+85°C... in 5°C steps Example: LZ: +0°C to +70°C LX: +0°C to +60°C FZ: -30°C to +70°C D3: -40°C to +85°C	Value x 10E-2 in ppm  Example  28= 0.28 ppm  10= 0.1 ppm	In MHZ	3.3: 3.3V 5: 5.0V 12: 12V

Example:



## ■ MECHANICAL SPECIFICATION

