

**OCXO SERIES 5000****Rev C**

6/28/05

■ **FEATURES**

**Small OCXO in SMD package**  
**Laser trim Option for final System Calibration**  
**Frequencies up to 100 MHz**

■ **ELECTRICAL PERFORMANCE**

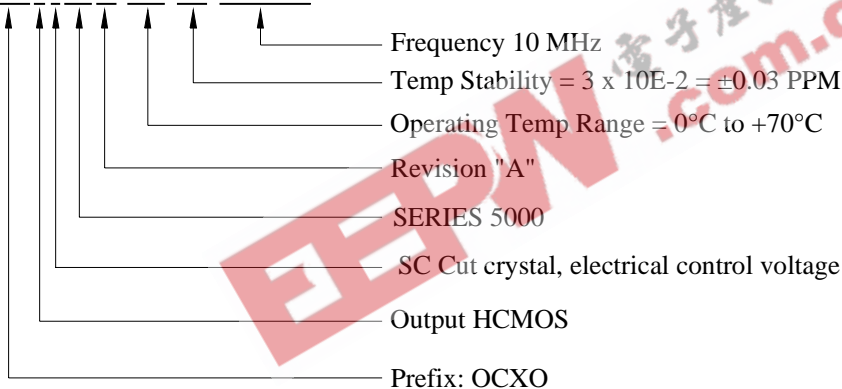
PARAMETER	OCXO SERIES 5000	
	AT CUT CRYSTAL	SC CUT CRYSTAL
Supply voltage, nom.	5V $\pm$ 5% (3.3V Optional)	
Power dissipation steady state	1.5 Watt Max.	
Heat up power	3 Watt Max	
Heat up time.	3 min Max	
Frequency range	1 To 100.000 MHz Standard	
Frequency Adjustment	$\pm$ 10PPM Min (0 to 5V)	$\pm$ 0.7PPM Min (0 to 5V)
Freq. stability vs. temperature LX: 0°C to 60°C FZ: -30°C to 70°C D3: -40°C to 85°	$\pm$ 0.05 PPM $\pm$ 0.1 PPM $\pm$ 0.25 PPM	$\pm$ 0.01 PPM $\pm$ 0.02 PPM $\pm$ 0.03 PPM
	(Standard, contact factory for different temp ranges and stabilities)	
Freq. stability vs. supply changes	$\pm$ 0.015 PPM Max for $\pm$ 5% Change	$\pm$ 0.010 PPM Max for $\pm$ 5% Change
Freq. stability vs. load changes	$\pm$ 0.01 PPM Max for $\pm$ 5% Change	$\pm$ 0.005 PPM Max for $\pm$ 5% Change
Long term stability (Aging)	$\pm$ 4 PPM Max for 10 Years $\pm$ 0.005 PPM/Day Max.	$\pm$ 1 PPM Max for 10 Years $\pm$ 0.002 PPM/Day Max.
Output	HCMOS/TTL/Sine 0 to +7dBm (Low voltage CMOS Available)	
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	1 E-10 /Sec	5 E-11 /Sec
Phase Noise @ 10MHz typ.	Offset    Phase Noise 10Hz      -90 dBc/Hz 100Hz     -125 dBc/Hz 1000Hz    -135 dBc/Hz 10000Hz   -150 dBc/Hz	Offset    Phase Noise 10Hz      -110 dBc/Hz 100Hz     -125 dBc/Hz 1000Hz    -140 dBc/Hz 10000Hz   -150 dBc/Hz
Calibration at +25°C max.	1/10 of Freq. Adjustment	

## ■ HOW TO ORDER (PART NUMBER)

Prefix	Output Type	Cut Type	Series	Revision	Temperature Range	Stability	Frequency
OX	2:HCMOS 4:LVCMOS 6:SINE	0:AT (No Vcontrol ) 1: SC (No Vcontrol ) 4: AT (Elect Vcontrol) 5: SC (Elect Vcontrol)	50:5000	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= 0.28PPM M  10= 0.1PPM	In MHZ

Example:

### OX2550A-LZ- 3 -10.000



## ■ MECHANICAL SPECIFICATION

