

OCXO SERIES 8000

Rev. B

■ FEATURES

Small OCXO in 1" SQ. package
 Frequencies up to 38.880 MHz
 AT and SC-Cut option

■ ELECTRICAL PERFORMANCE

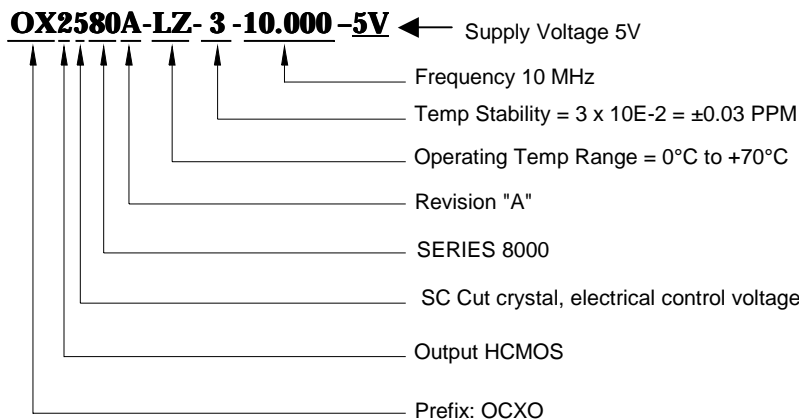
| PARAMETER | OCXO SERIES 8000 | |
|---|--|---|
| | AT CUT CRYSTAL | SC CUT CRYSTAL |
| Supply voltage, nom. | 5V ±5% Standard (3.3V, 12V Optional) | |
| Power dissipation steady state | 1.5 Watt Max. | |
| Heat up power | 3 Watt Max | |
| Heat up time. | 3 min Max | |
| Frequency range | 1 To 38.880 MHz Standard | |
| Frequency Adjustment | ±10PPM Min (0 to 5V) | ±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° | ±0.05 PPM ±0.1 PPM ±0.25 PPM | ±0.01 PPM ±0.02 PPM ±0.03 PPM |
| | (Standard, contact factory for different temp ranges and stabilities) | |
| Freq. stability vs. supply changes | ±0.015 PPM Max for ±5% Change | ±0.010 PPM Max for ±5% Change |
| Freq. stability vs. load changes | ±0.01 PPM Max for ±5% Change | ±0.005 PPM Max for ±5% Change |
| Long term stability (Aging) | ±4 PPM Max for 10 Years ±0.005 PPM/Day Max. | ±1 PPM Max for 10 Years ±0.002 PPM/Day Max. |
| Output | HCMOS/TTL/Sine 0 to +7dBm (Low voltage CMOS Available) | |
| 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 condition (Sine Output 10MHZ) | 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 -130 dBc/Hz 1000Hz -140 dBc/Hz 10000Hz -150 dBc/Hz |

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

■ HOW TO ORDER (PART NUMBER)

| Prefix | Output Type | Cut Type | Series | Revision | Temperature Range | Stability | Frequency | Supply Voltage |
|--------|-------------------------------|---|---------|----------|--|--|-----------|------------------------------|
| OX | 2:HCMOS 4:LVCMOS 6:SINE | 0:AT (No Vcontrol) 1: SC (No Vcontrol) 4: AT (Elect Vcontrol) 5: SC (Elect Vcontrol) | 80:8000 | 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: -20°C to +70°C FZ: -30°C to +70°C D3: -40°C to +85°C | Value x 10E-2 in PPM Example 28= 0.28PPM 10= 0.1PPM | In MHZ | 12:12V 5: 5V 3.3; 3.3V |

Example:



■ MECHANICAL SPECIFICATION

