

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) | ± 10 PPM Min ± 15 PPM Min | ± 0.7 PPM Min ± 1 PPM Min |
| Freq. stability vs. temperature LX: 0°C to 60°C FZ: -30°C to 70°C | ± 0.05 PPM ± 0.15 PPM | ± 0.010 PPM ± 0.020 PPM |
| | (Standard, contact factory for different temp ranges and stabilities) | |
| Freq. stability vs. supply changes | ± 0.01 PPM Max for $\pm 5\%$ Change | ± 0.005 PPM Max for $\pm 5\%$ Change |
| Freq. stability vs. load changes | ± 0.005 PPM Max for $\pm 5\%$ Change | ± 0.002 PPM Max for $\pm 5\%$ Change |
| Long term stability (Aging) | ± 0.5 PPM Max for 1 Years ± 0.005 PPM/Day Max. | ± 0.1 PPM Max for 1 Years ± 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

■ HOW TO ORDER (PART NUMBER)

| Prefix | Output Type | Cut Type | Series | Revision | Temperature Range | Stability | Frequency | Supply Voltage |
|--------|--|---|----------|----------|---|--|-----------|-------------------------------------|
| OX | 1:TTL 2:HCMOS 3:ACMOS 4:LVC MOS 6:SINE | 0:AT (No Vcontrol) 1: SC (No Vcontrol) 4: AT (Elect Vcontrol) 5: SC (Elect Vcontrol) | 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= 0.28PPM 10= 0.1PPM | In MHZ | 3.3; 3.3V 5: 5.0V 12; 12V |

Example:



■ MECHANICAL SPECIFICATION

