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 ±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	±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	-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	1/10 of Freq. Adjustment

HOW TO ORDER (PART NUMBER)

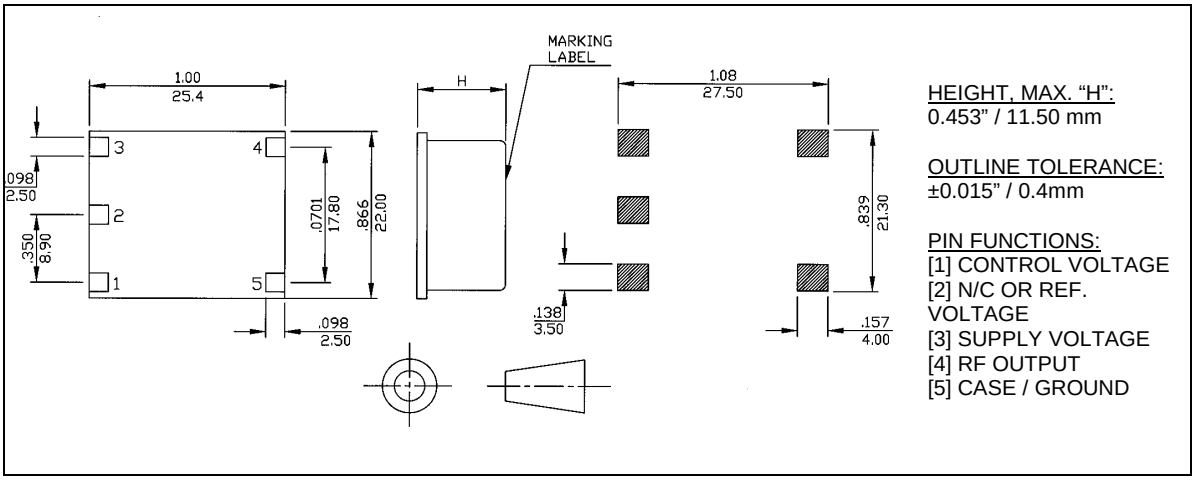
Prefix	Output Type	Cut Type	Series	Revision	Temperature Range	Stability	Frequency
OX	2:HCMOS 4:LVCMOS 6:SINE	0:AT (No Vcontrol) 1: SC (No Vcontrol) 4: AT (Elect Vcontrol) 5: SC (Elect Vcontrol)	50:5000	A	First letter Lowest Temperature, Second letter Highest Temperature: From A=-55°C to Z=+70°C, Then: 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 10= 0.1PPM	In MHZ

Example:

OX2550A-LZ- 3 -10.000

- Frequency 10 MHz
- Temp Stability = 3 x 10E-2 = ±0.03 PPM
- Operating Temp Range = 0°C to +70°C
- Revision "A"
- SERIES 5000
- SC Cut crystal, electrical control voltage
- Output HCMOS
- Prefix: OCXO

MECHANICAL SPECIFICATION



HEIGHT, MAX. "H":
0.453" / 11.50 mm

OUTLINE TOLERANCE:
±0.015" / 0.4mm

PIN FUNCTIONS:
[1] CONTROL VOLTAGE
[2] N/C OR REF. VOLTAGE
[3] SUPPLY VOLTAGE
[4] RF OUTPUT
[5] CASE / GROUND