

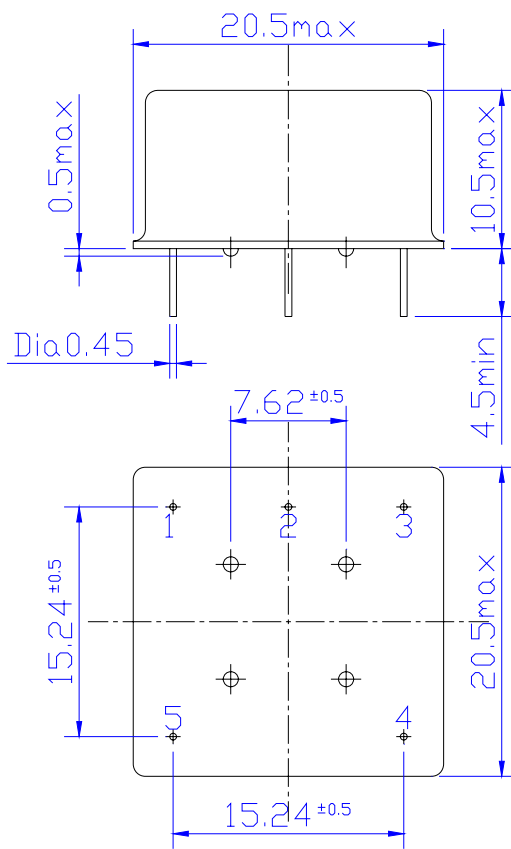
Oven Controlled Crystal Oscillator Specification

Part No.: OX-STD-10M

Detail Specification

Description	Guaranteed
Nominal Frequency	10MHz / $V_c = +2.0V (+25^\circ C)$
Frequency Tolerance	NMT $\pm 0.5\text{ppm} / V_c = +2.0V (+25^\circ C)$
Frequency Stability @ Temperature Range	$\pm 0.2\text{ppm}$
Temperature Range	$-30^\circ C \sim +85^\circ C$
Frequency Stability @ Load Range	$\pm 0.05\text{ppm} / CL \pm 5\%$
Frequency Stability @ Supply Voltage Range	$\pm 0.05\text{ppm} / +5V \pm 5\%$
Aging after 30 days operation (power)	< $\pm 2.0\text{ppb}$ per day < $\pm 0.5\text{ppm}$ @ first year < $\pm 3.0\text{ppm}$ @ 10 years
Short-term Stability	< 0.1ppb per second
Warm-up	< $\pm 0.5\text{ppm}$ after 5 min. power on
Supply Voltage	$+5V \pm 10\%$
Current	NMT 500mA @ warm-up NMT $200\text{mA} +25^\circ C$ @ stable working
Voltage Control	Range: $> \pm 10\text{ppm}$ Control Voltage: $+2.0V \pm 2.0V$ Slope: Positive Linearity: $< 10\%$ Input Impedance: $> 100K\Omega$ Modulation Bandwidth: $> 10\text{ KHz}$
Output	HCMOS Rectangular V_{OH} : $4.3V$ min. V_{OL} : $0.5V$ max. Duty Cycle: $45/55\%$ Rise/Fall Time: 4nS Load: $15\text{pF} // 10K\text{ Ohms}$
Phase noise	-65dbc/Hz @ 1Hz -100dbc/Hz @ 10Hz -120dbc/Hz @ 100Hz -140dbc/Hz @ 1kHz -145dbc/Hz @ 10kHz
Operable Temperature	$-40^\circ C \sim +85^\circ C$
Storage temperature	$-55^\circ C \sim +105^\circ C$
Reference drawing	5A2B20
Package	$20.5\text{mm} \times 20.5\text{mm} \times 10.5\text{mm}$ (Resistance Weld)

Package and Pin Connections



Pin Connections:

- #1: Vs
- #2: Output
- #3: GND
- #4: Vc
- #5: N.C.

Marking:

10M
STD
S/N: xxxx
ww/yy