**TCXO7500T-30.720MHz-A-V**
Next Generation Compensation IC Technology

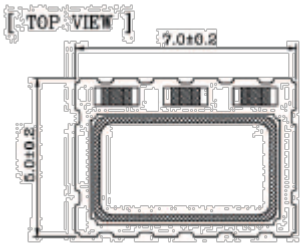
## Features and Benefits

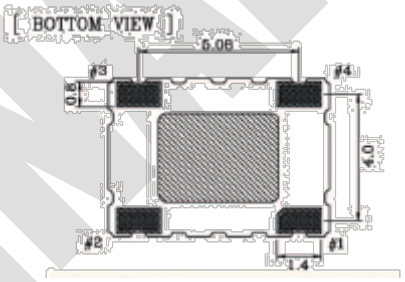
Better than +/- 250 ppb from -40℃ to +85℃
With respect to ( Fmax + Fmin ) / 2
30.720000 MHz  low noise clipped sine output
3.3V supply ; 3.5 mA max.
+/- 5 ppm min. pull with 1.5V +/- 1.0V control

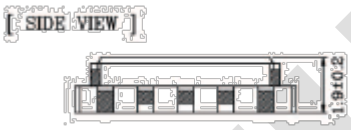
## Typical Applications

Mobile SATCOM
Mobile Radio
Harsh Environments
Femto-cell

## Mechanical Drawing




| PIN | FUNCTION |
|---|---|
| #1 | Vcon VC-TCXO<br>GND TCXO |
| #2 | GND |
| #3 | OUTPUT |
| #4 | VDD |

## Specification

| TCXO Specification | | Sym | Condition | Value | | | Unit | Note |
|---|---|---|---|---|---|---|---|---|
| | | | | Min. | Typ. | Max. | | |
| Operational Frequency Range | | $f_0$ | | | 30.720000 | | MHz | |
| | Clipped sine | | Load Capacitance | | 10 | | pF | |
| | | | Load Resistance | | 10 | | Kohm | |
| | | | Output Level | 0.8 | | | Vpk-pk | |
| | | | Start-up Time | | | 2.0 | milli-sec | |
| **Power Supply** | | | | | | | | |
| Voltage | | $V_{CC}$ | | 3.130 | 3.300 | 3.470 | V | |
| Current Consumption | | | | | | 3.5 | mA | At maximum supply |
| **Frequency versus Voltage** | | | | | | | | |
| | | | | +/- 5 ppm minimum | | | | |
| Pin 1: Control Voltage : | | | | 0.5 | 1.5 | 2.5 | V | |
| | | | | | | | | |
| **Frequency Stability** | | | | | | | | |
| Vs. Temperature | | -40°C to +85°C | | | | +/- 250 | ppb | With respect to ( Fmax + Fmin )/2 |
| Vs. at 25°C | | Initial Accuracy at time of shipment | | | | +/- 500 | ppb | |
| Vs. Reflow Shift | | After 24 hours settling time | | | | +/- 500 | ppb | |
| **Aging** | | | | | | | | |
| | | After 30 Days of Operation | | | | | | |
| | | | | | | +/- 1.00 | ppm | Over 20 years |
| **SSB Phase Noise** | | | | | | | | |
| @ 30.72 MHz | | 100 Hz | | | -115 | | dBc/Hz | |
| | | 1 KHz | | | -139 | | | |
| | | 10 KHz | | | -153 | | | |
| | | 100 KHz | | | -158 | | | |