

TEMPERATURE COMPENSATED CRYSTAL OSCILLATOR

STO-2520, STV-2520

Applications

- Cellular / PHS / GPS
Communication Equipment

Features

- Ultra thin / Dimensions(2.5 X 2.0 X 0.8)
- Seam sealed
- Low phase noise / Low power consumption
- High Stability $\pm 0.5\text{ppm}$ / $-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$

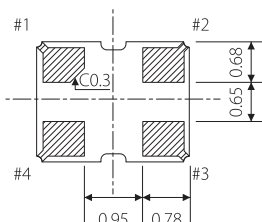
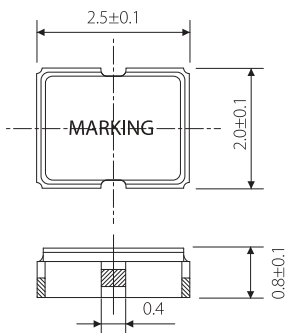
Specifications



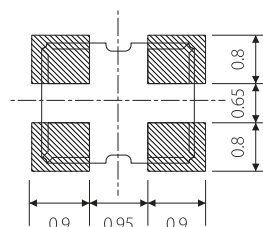
| Model | STO-2520 | STV-2520 | |
|----------------------------|--|--|---|
| Frequency range | 16~52 MHz | | |
| Nominal frequency(MHz) | 16.369, 16.384, 19.2, 26 | | |
| Frequency stability | Tolerance at 25°C | $\pm 2.0 \times 10^{-6}$ (Sixty minutes after reflow) | |
| | Temperature (Ref. to 25°C) | $\pm 0.5 \times 10^{-6}$ / $-40 \sim 85^{\circ}\text{C}$ | |
| | Supply voltage change | $\pm 0.2 \times 10^{-6}$ / $V_{dd} \pm 5\%$ | |
| | Load change | $\pm 0.2 \times 10^{-6}$ / $Z_L \pm 10\%$ | |
| Aging (at 25°C) | $\pm 1.0 \times 10^{-6}$ / First year | | |
| Storage temperature range | $-40 \sim 85^{\circ}\text{C}$ | | |
| Power supply voltage (Vcc) | $\pm 1.8 \sim +3.3\text{V DC} \pm 5\%$ | | |
| Current consumption | 1.5mA max.(~26MHz), 2.0mA max.(~32MHz), 2.5mA max.(~52MHz) | | |
| Output | Load (ZL) | 10kΩ //10 pF | |
| | Voltage | 0.8V p-p min. | |
| | Waveform | Clipped Sine Wave (DC-coupled output) | |
| External control function | Frequency tuning range | — | $\pm 8.0 \times 10^{-6}$ min. (Positive) |
| | External control voltage | — | $+1.5\text{V} \pm 1.0\text{V DC} / +0.9\text{V} \pm 0.9\text{V DC}$ |
| | Input impedance(Zvin) | — | 500kΩ min. (770kΩ typ.) |
| Phase noise | -135dBc typ. at 1kHz offset | | |

Package quantity: 3000pcs max./Reel.

Outline and Dimensions[unit:mm]



Example of a Terminal Land Pattern



| Terminal | Connection | |
|----------|------------|---------|
| | TCXO | VC-TCXO |
| #1 | GND | Vcont |
| #2 | GND | |
| #3 | OUTPUT | |
| #4 | Vdd | |