

SMD TCXO

Crystal Oscillators

2.5x2.0x0.8mm W22 Series



Features

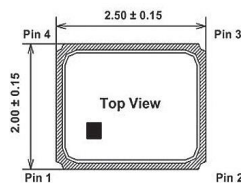
- Temperature Stability: ± 0.5 ppm $\sim\pm 2.0$ ppm.
- Operating Temperature Range: $-30^{\circ}\text{C}\sim 85^{\circ}\text{C}$.
- Supply Voltage: 1.8V \sim 3.3V.
- Voltage Control Function Available.
- Applications: GPS, WiMAX, Cellular and Wireless Communications.
- RoHS Compliant / Pb Free.



Crystals specifications

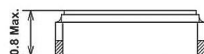
ITEMS/TYPE		W22
Frequency Range		13 ~ 52MHz
Output Load		10K Ω // 10pF
Oscillation Mode		Fundamental
Supply Voltage		1.8~3.3 V
Output Type		Clipped Sinewave
Clipped Sinewave Output Voltage		0.8 Vp-p min
Supply Current		2.0mA max.
Harmonics		- 5 dBc Max.
Output Level		0.8 Vp-p min
Frequency Stability	Vs Temperature($-30\sim+85^{\circ}\text{C}$)	± 0.5 ppm / ± 2.0 ppm
	Supply Voltage ($V_{cc}=\text{Typical } \pm 0.1\text{V}$)	± 0.2 ppm max.
	Load (Load varies $\pm 10\%$)	± 0.2 ppm max. (10K Ω / 10pF $\pm 10\%$)
Slope of Frequency Drift		± 0.1 ppm / $^{\circ}\text{C}$ Typical ; ± 0.5 ppm / $^{\circ}\text{C}$ Max.
Initial Frequency Tolerance at 25°C after 2 Reflows		± 2.5 ppm max. (After 2 times reflow)
Storage Temperature Range		$- 40\sim+85^{\circ}\text{C}$
Auto Frequency Control Range		$\pm 7 \sim \pm 16$ ppm (1.4+/- 1V)
Start-up Time		5 ms max.
Phase Noise at 1 kHz offset		- 130 dBc / Hz
Aging(at 25°C)		± 1 ppm / year
Packing Unit		3,000pcs/Reel

Dimensions and patterns(unit:mm)

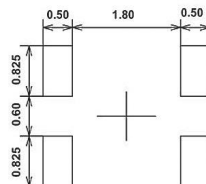
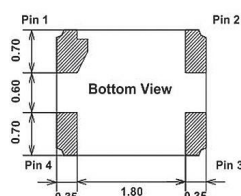


Pin Connection

Name	Connection
Pin 1	AFC or GND
Pin 2	GND
Pin 3	OUTPUT
Pin 4	VCC



Recommended Land Pattern



Units:mm