

SMD TCXO

Crystal Oscillators

3.2x2.5x1.0mm W32 Series



Features

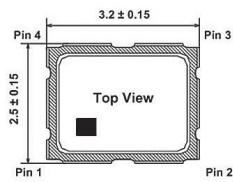
- Temperature Stability: $\pm 0.5 \text{ ppm} \sim \pm 2.0 \text{ ppm}$.
- Operating Temperature Range: $-30^\circ\text{C} \sim 85^\circ\text{C}$.
- Supply Voltage: 1.8V~3.3V.
- Voltage Control Function Available.
- Applications: GPS, WiMAX, Cellular and Wireless Communications.
- RoHS Compliant / Pb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



Crystals specifications

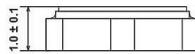
ITEMS/TYPE		W32
Frequency Range		13 ~ 52MHz
Output Load		10KΩ // 10pF
Oscillation Mode		Fundamental
Supply Voltage		1.8~3.3 V
Output Type		Clipped Sinewave
Clipped Sinewave Output Voltage		0.8 Vp-p min
Supply Current		2.0mA max.
Harmonics		- 5 dBc Max.
Output Level		0.8 Vp-p min
Frequency Stability	Vs Temperature($-30\text{~}+85^\circ\text{C}$)	$\pm 0.5 \text{ ppm} / \pm 2.0 \text{ ppm}$
	Supply Voltage ($V_{cc}=\text{Typical } \pm 0.1\text{V}$)	$\pm 0.2 \text{ ppm} \text{ max.}$
	Load (Load varies $\pm 10\%$)	$\pm 0.2 \text{ ppm} \text{ max. (10K}\Omega / 10\text{pF}\pm 10\%)$
Slope of Frequency Drift		$\pm 0.1 \text{ ppm} / ^\circ\text{C} \text{ Typical ; } \pm 0.5 \text{ ppm} / ^\circ\text{C} \text{ Max.}$
Initial Frequency Tolerance at 25°C after 2 Reflows		$\pm 2.5\text{ppm} \text{ max. (After 2 times reflow)}$
Storage Temperature Range		- 40~+85 °C
Auto Frequency Control Range		$\pm 7 \sim \pm 16 \text{ ppm (1.4+/- 1V)}$
Start-up Time		5 ms max.
Phase Noise at 1 kHz offset		- 130 dBc / Hz
Aging(at 25°C)		$\pm 1\text{ppm} / \text{year}$
Packing Unit		3,000pcs/Reel

Dimensions and patterns(unit:mm)

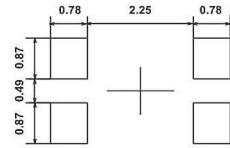
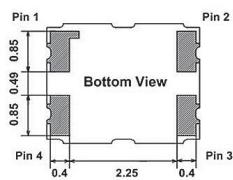


Pin Connection

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



Recommended Land Pattern



Units:mm