

# SMD 2520 TCXO /VC-TCXO



Size: 2.5×2.0×0.80mm

7Q Series SMD TCXO Oscillators

## Features

- 2520 size, 0.80mm high ultra miniature and lightweight SMD TCXO.
- Low voltage operation and low phase noise.
- Temperature Stability:  $\pm 0.5\text{ppm} \sim \pm 2.0\text{ppm}$ .
- Automatic mounting and reflow soldering.
- Voltage Control Function Available.
- Applications: GPS, WiMax, Cellular, Wireless communications, Smart Phone, etc.
- Single package structure.
- RoHS Compliant / Pb-Free.



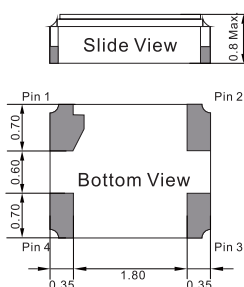
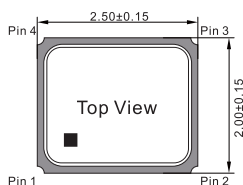
## Electrical Specifications

Item /Type		7Q (SMD 2520 TCXO)
Output Type		Clipped Sinewave
Output Load		10K $\Omega$ // 10pF
Oscillation Mode		Fundamental
Supply Voltage		1.8~3.3V
Frequency Range		13 ~ 52 MHz
Clipped Sinewave Output Voltage		0.8 Vp-p Typical
Frequency Stability	Vs. Temperature (-30~+85°C)	$\pm 0.5 / \pm 2.0$ ppm
	Vs. Load (Load varies $\pm 10\%$ )	$\pm 0.2\text{ppm Max.}$
	Vs. Supply Voltage (Vcc = Typical $\pm 0.1\text{V}$ )	$\pm 0.2\text{ppm Max.}$
Frequency Tolerance	as 25°C after 2 Reflows with Typical Applied to Auto Frequency Control Pin	$\pm 2.5\text{ppm Max.}$
Slope of Frequency Drift		$\pm 0.1\text{ppm}/^\circ\text{C}$ Typical; $\pm 0.5\text{ppm}/^\circ\text{C}$ Max.
Operating Temperature Range		-30~+85°C
Auto Frequency Control (AFC)Range*		$\pm 7 \sim \pm 16\text{ppm}$ (1.4 $\pm 1\text{V}$ )
Supply Current		2.0mA Max.
Start-up Time		5ms Max.
Harmonics		-5dBc Max.
Phase Noise at 1kHz Offset		-130dBc/Hz
Aging (at 25°C)		$\pm 1\text{ppm/Year}$ Max.

## Dimensions

\*AFC Range is selective and disable is acceptable.

Units:mm



## Pin Connection

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

## Recommended Land Pattern

