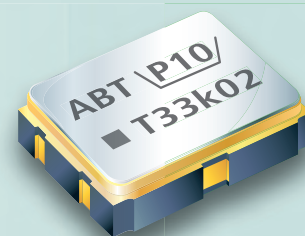


SMD TCXO 3.2 X 2.5 X 1.0 mm 7Q Series

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: $1.8\text{ V} \sim 3.3\text{ V}$.
- Voltage Control Function Available.
- Frequencies: 16.367667 MHz, 16.368 MHz, 16.369 MHz, 16.8 MHz, 19.2 MHz, 20 MHz, 26 MHz, 33.6 MHz, 38.4 MHz, 40 MHz.
- Applications: GPS, WiMAX, Cellular and Wireless Communications.
- RoHS Compliant / Pb Free.

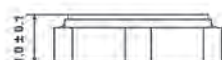
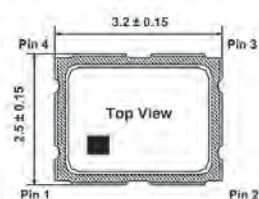


Electrical Specifications

Item / Type		7Q
Output Type		Clipped Sinewave
Output Load		$10\text{K}\Omega // 10\text{ pF}$
Oscillation Mode		Fundamental
Supply Voltage		$1.8 \sim 3.3\text{ V}$
Frequency Range		$13 \sim 52\text{ MHz}$
Clipped Sinewave Output Voltage		$0.8\text{ V}_{\text{p-p Min.}}$
Frequency Stability	Vs. Temperature ($-30 \sim +85^{\circ}\text{C}$)	$\pm 0.5 / \pm 2.0\text{ ppm}$
	Vs. Load (Load varies $\pm 10\%$)	$\pm 0.2\text{ ppm Max.}$
	Vs. Supply Voltage ($V_{\text{CC}} = \text{Typical} \pm 0.1\text{ V}$)	$\pm 0.2\text{ ppm Max.}$
Frequency Tolerance	at 25°C after 2 Reflows with Typical Applied to Auto Frequency Control Pin	$\pm 2.5\text{ ppm Max.}$
Slope of Frequency Drift		$\pm 0.1\text{ ppm} / ^{\circ}\text{C Typical} ; \pm 0.5\text{ ppm} / ^{\circ}\text{C Max.}$
Storage Temperature Range		$-40 \sim +85^{\circ}\text{C}$
Auto Frequency Control (AFC) Range *		$\pm 7 \sim \pm 16\text{ ppm} (1.4 \pm 1\text{V})$
Supply Current		2.0 mA Max.
Start-up Time		5 ms Max.
Harmonics		-5 dBc Max.
Phase Noise at 1 kHz offset		$-130\text{ dBc} / \text{Hz}$
Aging (at 25°C)		$\pm 1\text{ ppm} / \text{year Max.}$

* AFC Range is selective and disable is acceptable.

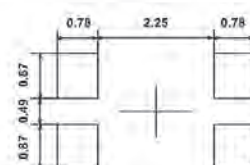
Dimensions



Pin Connection

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

Recommended Land Pattern



Units: mm