

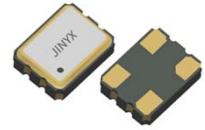
CRYSTAL OSCILLATOR



SERIES VV20 , SMD TEMPERATURE COMPENSATED QUARTZ CRYSTAL OSCILLATORS

Features

- .Temperature Stability: $\pm 0.5 \text{ ppm} \sim \pm 2.0 \text{ ppm}$.
- . Operating Temperature Range: $- 40 \sim 85 \text{ }^\circ\text{C}$.
- .Supply Voltage: $1.8 \text{ V} \sim 3.3 \text{ V}$.
- .Voltage Control Function Available.
- .Applications: GPS, WiMAX, Cellular and Wireless Communications.
- .RoHS Compliant / Pb Free.



Electrical Specifications

Item/Type		VV20(VC-TCXO)
Output Type		Clipped Sinewave
Output Load		10K Ω // 10 pF (+/-10%)
Oscillation Mode		Fundamental
Supply Voltage		1.8 ~ 3.3 V (+/-0.5%)
Frequency Range		10 ~ 54 MHz
Clipped Sinewave Output Voltage		0.8 Vp-p Min
Frequency Stability	Vs. Temperature (- 40 ~ + 85 $^\circ\text{C}$)	$\pm 0.5 \text{ ppm}$
	Vs. Load (Load varies $\pm 10 \%$)	$\pm 0.2 \text{ ppm Max.}$
	Vs. Supply Voltage (Vcc =1.8-3.3V+/-0.5)	$\pm 0.2 \text{ ppm Max.}$
Frequency Tolerance	at 25 $^\circ\text{C}$ after 2 Reflows with Typical Applied to Auto Frequency Control Pin	$\pm 0.5 \text{ ppm Max.}$
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 ~ + 85 $^\circ\text{C}$
Auto Frequency Control (AFC) Range *		$\pm 8 \sim \pm 15 \text{ ppm}$ (Vcont=1.5V+/-1V)
Supply Current		1.5 mA Max
Start-up Time		2 ms Max
Aging (at 25 $^\circ\text{C}$)		$\pm 1 \text{ ppm} / \text{year}$ Max

Dimensions

