

**Thru-hole Type**  
**2X**  
 [ 20.3×12.7×11.0 mm ]

Waveform  
**Rectangular  
 HCMOS /Sine wave**

Best Stability  
**±50 ppb**

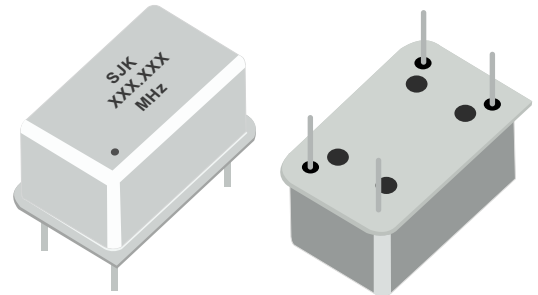
**Voltage Control**

Supply Voltage  
**3.3V / 5.0V**

Frequency Range  
**5 MHz~100 MHz**

## Features

- Oven Controlled Crystal Oscillator (OCXO)
- Dimension 20.3×12.7×11.0/9.2 mm, DIP-14 thru-hole package
- Frequency range from 5MHz to 100MHz.
- ±50ppb stability over -20°C to +70°C.
- Stratum 3 (Overall ±4.6ppm including 10 years aging.)
- Voltage control (Electronic frequency tuning) is available.
- RoHS Compliant
- Applications: SDH/SONET, Telecommunication base station, Test and measurement equipment, Synthesizer, etc.



## Standard Specifications

### 2X (20.7×12.7×11.0/9.2 mm Thru-Hole OCXOs)

Output Frequency	5.000MHz~40.000MHz	10.000MHz~100.000MHz	
Wave Form	Rectangular	HCMOS	Sine Wave
Level	-	-	8 dBm min.
“1” Level	90% Vcc	80% Vcc	-
“0” Level	10% Vcc	20% Vcc	-
Duty Cycle	45%~55%	40%~60%	-
Rise/Fall time / Harmonics	6ns max.	3ns max.	-30dBc max.
Load	15pF	1KΩ // 10pF	50Ω
Spurious	-60dBc max.	-	-80dBc max.
<b>Frequency stability</b> Tolerance	±50ppb~±200ppb	±50ppb~±100ppb	
vs. Temperature	±50ppb~±200ppb	±50ppb~±100ppb	
vs. Supply voltage	±50ppb max.	±20ppb max.	
vs. Load	±0.5ppb max.	±10ppb max.	
vs. Warm-up	±0.1ppm max.	±50ppb max.	
vs. Short term	±0.05ppb/s max.	±0.05ppb/s max.	
vs. Aging	-	-	
Daily	±0.5ppb max.	±5.0ppb max.	
Yearly	±0.5ppm max.	±500ppb max.	
10 Years	±3.0ppm max.	±1.7ppm max.	

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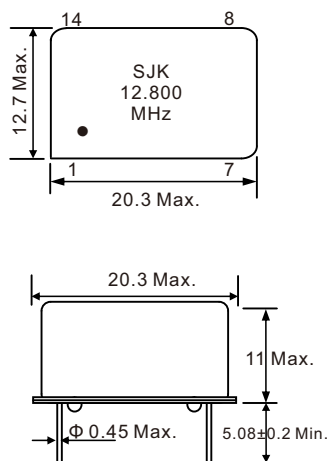
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**2X** (20.7×12.7×11.0/9.2 mm Thru-Hole OCXOs)

Output Frequency	5.000MHz~40.000MHz	10.000MHz~100.000MHz
<b>Phase noise</b>	@10Hz	-105dBc/Hz max.
	@100Hz	-130dBc/Hz max.
	@1KHz	-140dBc/Hz max.
	@10KHz	-150dBc/Hz max.
	@100KHz	-160dBc/Hz max.
		-135dBc/Hz (fo=100MHz)
		-162dBc/Hz (fo=100MHz)
		-173dBc/Hz (fo=100MHz)
		-176dBc/Hz (fo=100MHz)
<b>Electrical Frequency Adjustment</b>	-	-
Tuning range	±5.0ppm max.	±2.0ppm min.
Control voltage	0~3.3V / 0-5V	0~3.0V / 0~4.5V
Slope	Positive	Positive
Center voltage	+1.65V / +2.5V	+1.65V / +2.25V
Linearity	±10%	±10%
Input impedance	100KΩ max.	100KΩ max.
<b>Power</b>	Voltage	3.3V / 5.0V
	Current	400mA max.
	State state	0.8W max.
<b>Temperature</b>	Operating temperature	-20°C~+70°C, -40°C~+85°C
	Storage temperature	-55°C~+105°C

## Dimensions And Pin-functions (Unit: mm)



### Pin Connections

Pin No.	Connection
1	Vco Input /NC
7	0 Volts & Case
8	R.F. Output
14	Vdd

