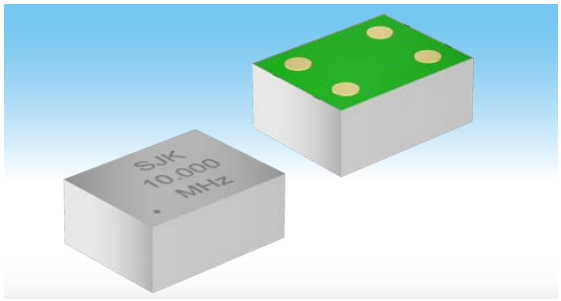
OCXO / Oven Controlled Crystal Oscillator

1X Series SMD 9×7 OCXO | **10MHz~50MHz** | **O: CMOS** | **Size: 9.7×7.5×4.0mm**



Features

- High Q factory crystal, high reliability
- Smallest size SMD package OCXO with 9.7×7.5×4.0mm
- Low power consumption, Fast warm-up
- Voltage control (Electronic Frequency Tuning) is standard
- CMOS output with frequency range from 10MHz to 50MHz
- Low aging, high stability, frequency stability best to ±5ppb
- Application for small base communication, Test & Measurement, Frequency synthesis, Satellite, Microwave, Radar system, etc
- RoHS Compliant /Pb Free

Standard Specifications

Item \ Type		1X Series SMD 9×7 OCXO
Frequency Range		10MHz~50MHz
Initial Frequency Accuracy		±200ppb max.
Frequency Stability	vs. Supply Voltage	±2.0ppb max. (Vcc±5%)
	vs. Load	±2.0ppb max. (Load±5%)
	vs. Aging	±1.0ppb max./after 30 days ; ±100ppb max./first year
Short Term Stability@100MHz		≤0.05ppb/s
Supply Voltage		+3.3V /+5.0V
Power Consumption		1.5W max. ; 0.4W max. at steady-state.
Output Level		LVCMOS
Output Load		15pF
Harmonics		-40dBc max.
Spurious		-80dBc max.
Voltage Control Characteristics		≥±1.0ppm min.
		Vc=1.65±1.65V; Vc=2.0±2.0V; Vc=2.5±2.5V;
		Fixed frequency (without voltage control)
Storage Temperature		-55~+105°C
Package Size (mm)		9.7×7.5×4.0

Note: Final product specifications are subject to official specifications.

Frequency Stability vs Operating Temperature Range

Frequency Stability \ Temp. Range	-20~+70°C	-40~+70°C	-40~+85°C	-55~+85°C
≤±5.0ppb	○	△	△	△
≤±10ppb	○	○	○	○
≤±20ppb	○	○	○	○

Note: ○:Available; △:Contact Us; X: Not available

Phase Noise @20MHz

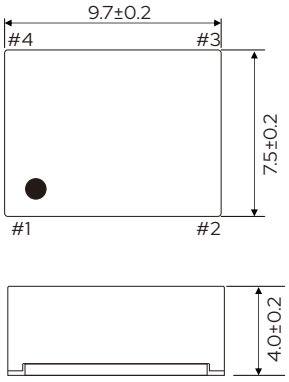
Phase Noise (dBc/Hz)					
1Hz	10Hz	100Hz	1KHz	10KHz	100KHz
-75 max.	-105 max.	-140 max.	-150 max.	-155 max.	-155 max.

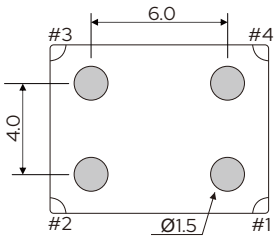
OCXO / Oven Controlled Crystal Oscillator

OCXO Package Size And Pin Function

Unit: mm

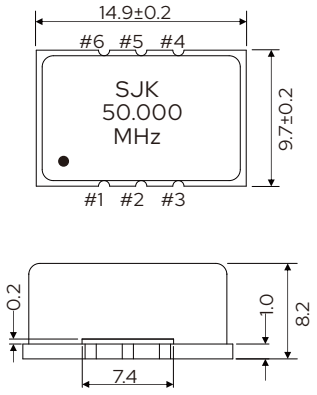
9×7 (SMD)

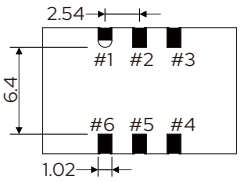




Pin Connections	
Pin No.	Connection
#1	Vcont: EFC NC
#2	GND
#3	Output
#4	Vcc

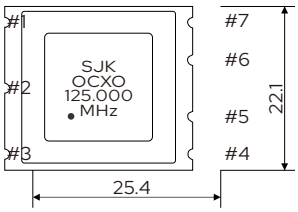
14×9 (SMD)

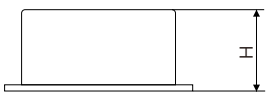




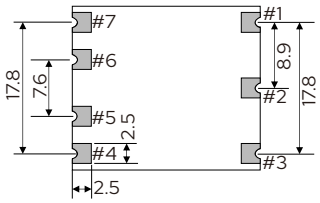
Pin Connections	
Pin No.	Connection
#1	Vcont: EFC GND/NC
#2	NC
#3	GND
#4	Output
#5	NC
#6	Vcc

25×22 (SMD)



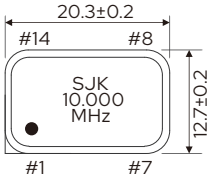


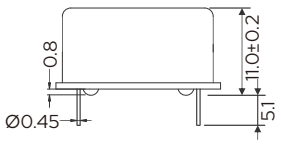
H: Available 11.5mm、12mm

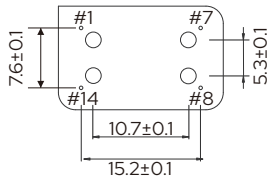


Pin Connections	
Pin No.	Connection
#1	Vcont: EFC NC
#2	Reference Voltage/NC
#3	Vcc
#4	Output
#5	Oven monitor /NC
#6	NC
#7	GND

20×14 (DIP14)

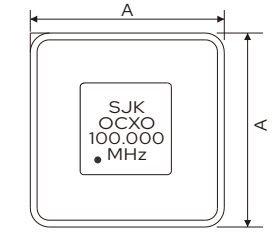




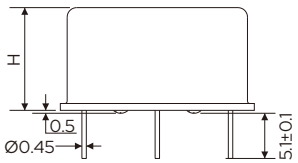


Pin Connections	
Pin No.	Connection
#1	Vcont: EFC GND/NC: OCXO
#7	GND
#8	Output
#14	Vcc

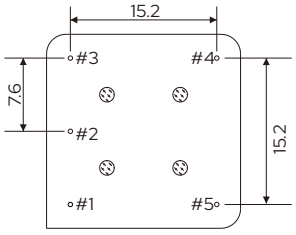
20×20 (DIP)



A: Available 20.6mm、21.7mm

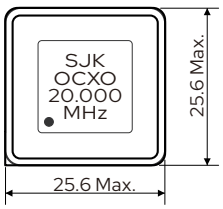


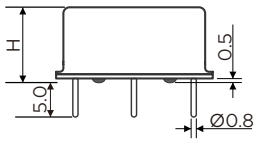
H: Available 10.2mm、11mm



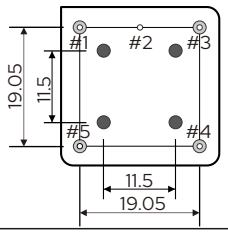
Pin Connections	
Pin No.	Connection
#1	Vcc
#2	Output
#3	GND
#4	Vcont: EFC NC: OCXO
#5	Reference Voltages / NC

25×25 (DIP)



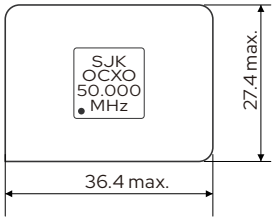


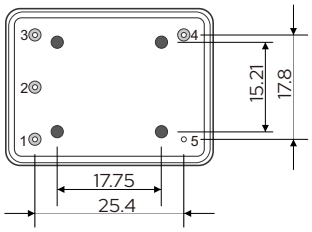
H: Available 10mm、12.5mm、13mm

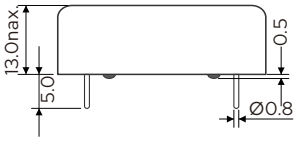


Pin Connections	
Pin No.	Connection
#1	Output
#2	GND
#3	Vcont: EFC / NC: OCXO
#4	Reference Voltages / NC
#5	Vcc

36×27 (DIP)







Pin Connections	
Pin No.	Connection
#1	Vcont: EFC GND/NC
#2	Reference Voltages / NC
#3	Vcc
#4	Output
#5	GND