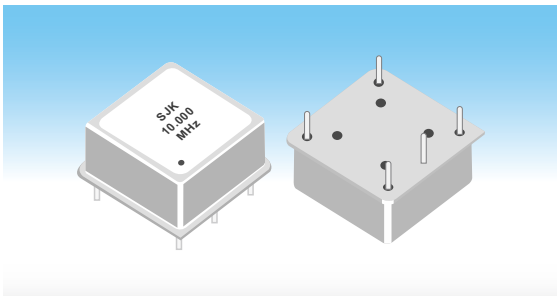
OCXO / Oven Controlled Crystal Oscillator

9M Series Thru-hole DIP 25×25 OCXO 10MHz~125MHz O: CMOS/Sine-Wave Size: 25.6×25.6×13.0mm



Features

- High Q factory / Low aging crystal, high reliability
- Thru-hole DIP OCXO with 25.6×25.6×13.0mm
- Voltage control (Electronic Frequency Tuning) is standard
- CMOS/Sine-wave output with frequency range: 10MHz~125MHz
- High stability, frequency stability best to ±0.5ppb
- Application for base, Test & Measurement, Broadcasting system, Frequency synthesis, Wireless communication, Radar system, etc
- RoHS Compliant /Pb Free

Standard Specifications

Item \ Type		9M Series Thru-hole DIP 25×25 OCXO	
Frequency Range		10MHz~125MHz	
Initial Frequency Accuracy		±50ppb max.	
Frequency Stability	vs. Supply Voltage	±0.5ppb max. (Vcc±5%)	
	vs. Load	±0.5ppb max. (Load±5%)	
	vs. Aging	±0.2ppb max./after 30 days ; ±20ppb max./first year	
Short Term Stability@100MHz		≤0.01ppb/s	≤0.005ppb/s
Supply Voltage		+3.3V /+5.0V /12.0V	
Power Consumption		4.0W (max.) ; 1.0W max. (@steady-state.)	
Output Level		LVCMOS	Sine-Wave
Output Load		15pF	50Ω
Harmonics		-40dBc max.	
Spurious		-80dBc max.	
Voltage Control Characteristics		Analog≥±0.3ppm 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)		25.6×25.6×13.0(10.0 /12.5)	

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
≤±0.5ppb	○	○	○	△
≤±1.0ppb	○	○	○	△
≤±3.0ppb	○	○	○	○
≤±5.0ppb	○	○	○	○
≤±10ppb	○	○	○	○
≤±20ppb	○	○	○	○
Note: ○:Available; △:Contact Us; X: Not available				

G-Sensitiviry Indicators

Code \ Spec.	ppb/g		
	G1	G2	G3
10MHz	1	0.5	0.3

Phase Noise @100MHz

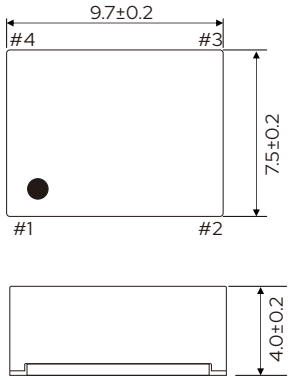
Phase Noise (dBc/Hz)					
1Hz	10Hz	100Hz	1KHz	10KHz	100KHz
-110 max.	-120 max.	-145 max.	-170 max.	-180 max.	-185 max.

OCXO / Oven Controlled Crystal Oscillator

OCXO Package Size And Pin Function

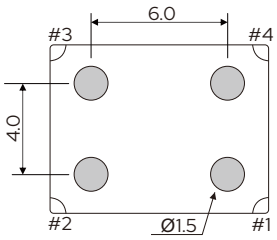
Unit: mm

9×7 (SMD)

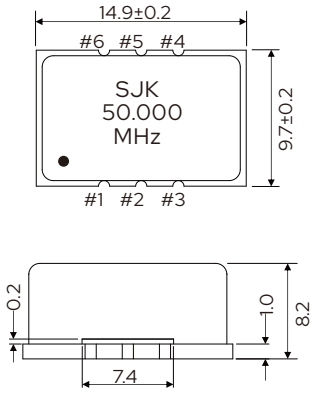


Pin Connections

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

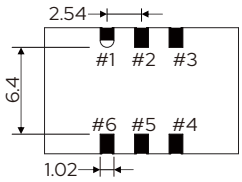


14×9 (SMD)

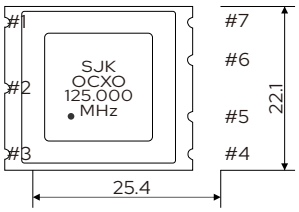


Pin Connections

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



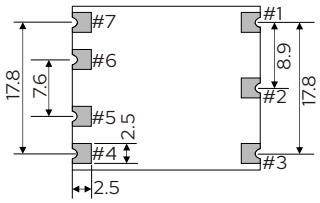
25×22 (SMD)



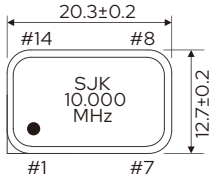
Pin Connections

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

H: Available 11.5mm、12mm

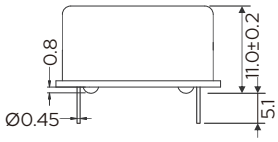


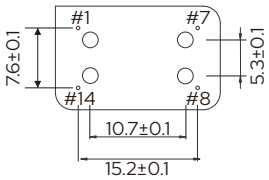
20×14 (DIP14)



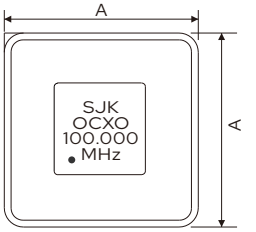
Pin Connections

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

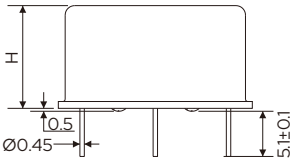




20×20 (DIP)



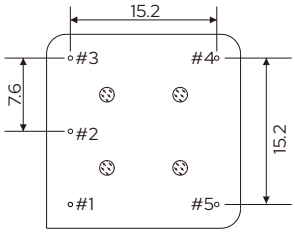
A: Available 20.6mm、21.7mm



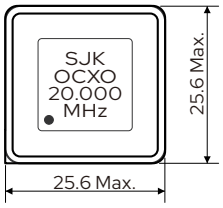
H: Available 10.2mm、11mm

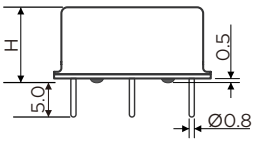
Pin Connections

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



25×25 (DIP)

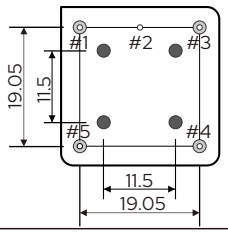




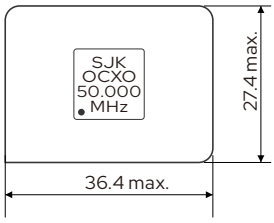
H: Available 10mm、12.5mm、13mm

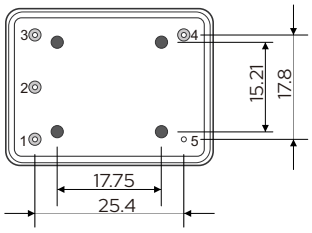
Pin Connections

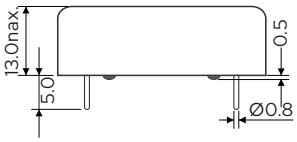
Pin No.	Connection
#1	Output
#2	GND
#3	Vcont: EFC / NC: OCXO
#4	Reference Voltages / NC
#5	Vcc



36×27 (DIP)







Pin Connections

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