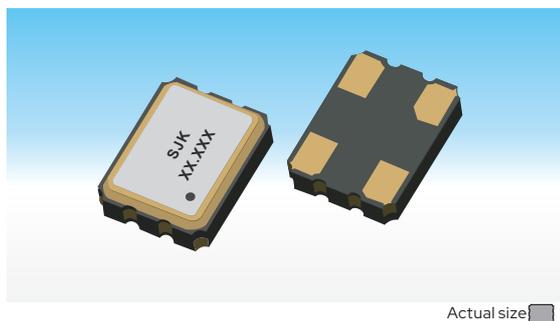# Crystal Oscillator For Automotive

A3N Series SMD3225 Crystal Oscillator For Automotive 1~50MHz O: CMOS Size: 3.2×2.5×1.0mm
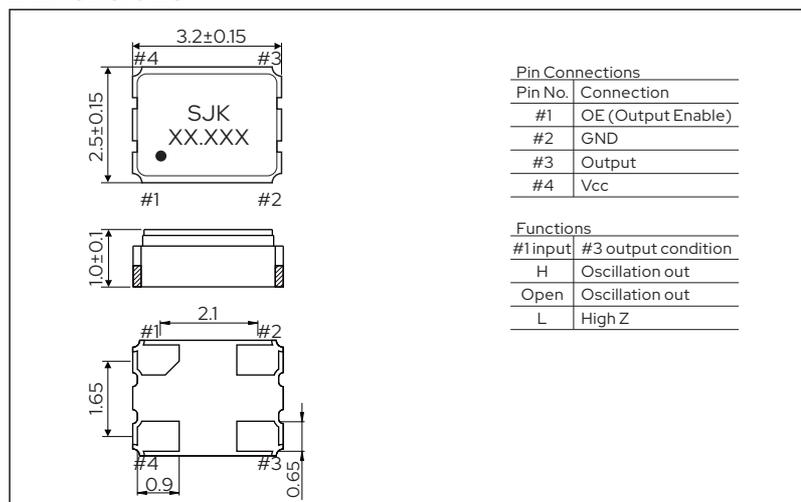
Features

- SMD3225 seam sealed clock crystal oscillator
- AEC–Q100 qualified
- 3-state function available
- Supply voltage: 1.8V~3.3V
- Available frequency range: 1MHz~50MHz
- High stability, low phase jitter, low power consumption
- Application for bluetooth, ADAS, HEV-EV, BMS, Telematics, Smart cockpit, Body control, Wireless communications, etc.
- RoHS Compliant /Pb Free

Actual size

Pb Free

RoHS Compliant

Standard Specifications

Item / Type	A3N Series SMD3225 Crystal Oscillator For Automotive
Output Type	CMOS
Load condition	15pF, or specify
Frequency Range	1MHz~50MHz
Supply Voltage	1.8V~3.3V
Frequency Stability (All Condition)	±25ppm, ±30ppm, ±50ppm, ±100ppm, or specify
Current Consumption	20mA max.
Stand-by Current	10μA max.
Symmetry	45~55%
0 Level Output Voltage (V_{OL})	0.1 Vcc max.
1 Level Output Voltage (V_{OH})	0.9 Vcc min.
Rise Time / Fall Time	8.0ns max.
OE Pin 0 Level Input Voltage (V_{IL})	0.2Vcc max.
OE Pin 1 Level Input Voltage (V_{IH})	0.8Vcc min.
Start-up Time	10ms max.
Operating Temperature Range	–40~+85°C, –40~+105°C, –40~+125°C, or specify
Storage Temperature Range	–55~+125°C
Phase Jitter (12KHz~20MHz)	1ps max.

Dimensions

3.2±0.15
2.5±0.15
#4 #3
SJK
XX.XXX
#1 #2

1.0±0.1

2.1
#1 #2
1.65
#4 #3
0.9 0.65

Pin Connections

Pin No.	Connection
#1	OE (Output Enable)
#2	GND
#3	Output
#4	Vcc

Functions

#1 input	#3 output condition
H	Oscillation out
Open	Oscillation out
L	High Z

Recommended Land Pattern   [mm]

Top View

2.2
0.1μF
1.75
1.2
0.95