

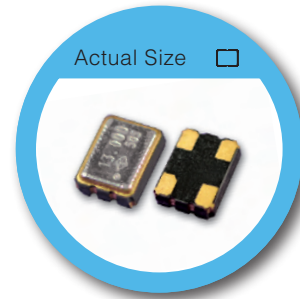
3.2 x 2.5 mm SMD Crystal Oscillator – OX Type

FEATURE

- Typical 3.2x2.5x1.05 mm ceramic SMD package.
- Tight symmetry (45 to 55%) available.
- Operation voltage: 1.8V, 2.5V, 3.3V
- Packing: Tape & Reel, 3000pcs per Reel.

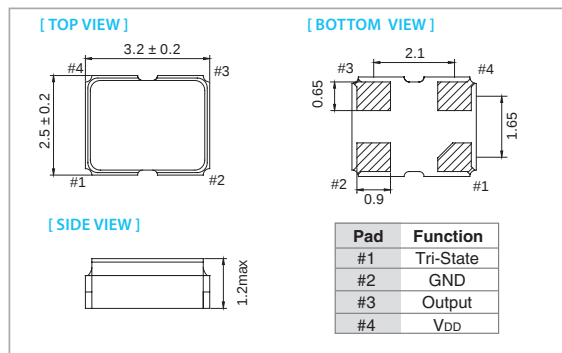
TYPICAL APPLICATION

- WLAN/WiMax,
- Mobile Phone
- DSC, Set-top Box, HDTV

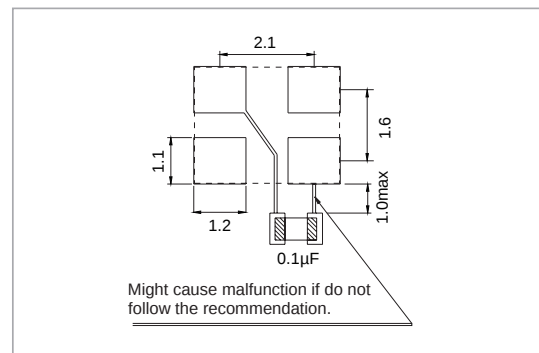


RoHS Compliant Standard

DIMENSION (mm)



SOLDER PAD LAYOUT (mm)



ELECTRICAL SPECIFICATION

Parameter	3.3 V		2.5 V		1.8 V		unit	
	Min.	Max.	Min.	Max.	Min.	Max.		
Supply Voltage Variation (VDD) 10%	2.97	3.63	2.25	2.75	1.62	1.98	V	
Frequency Range	1	125	1	125	1	125	MHz	
Standard Frequency	24, 26, 32, 38.4, 40							
Supply Current	1MHz ≤ F0 <100MHz	—	15	—	10	—	7	mA
	100MHz ≤ F0 <125MHz	—	25	—	20	—	12	
Duty Cycle		45	55	45	55	45	55	%
Output Level (CMOS) Output High (Logic "1")		90%VDD	—	90%VDD	—	90%VDD	—	V
Output Low (Logic "0")		—	10%VDD	—	10%VDD	—	10%VDD	
Transition Time:Rise/Fall Time ⁺								nSec
1MHz ≤ F0 < 20MHz		—	3	—	4	—	5	
20MHz ≤ Fo < 125MHz		—	2	—	3	—	4	
Start Time		—	2	—	2	—	2	mSec
Tri-State(Input to Pin 1) Enable		0.7 VDD	—	0.7 VDD	—	0.7 VDD	—	V
Disable		—	0.3 VDD	—	0.3 VDD	—	0.3 VDD	
Absolute Clock Period Jitter		—	40	—	40	—	40	pSec
RMS Phase Jitter (Integrated 12KHz ~ 20MHz)		—	1	—	1	—	1	pSec
Standby Current		—	15	—	15	—	15	µA
Aging		—	±3	—	±3	—	±3	ppm
Storage Temp. Range		-55	125	-55	125	-55	125	°C

Standard frequencies are frequencies which the crystal has been designed and does not imply a stock position.

⁺ Transition times are measured between 10% and 90% of VDD, with an output load of 15pF.

FREQ. STABILITY vs. TEMP. RANGE

Temp. (°C)	ppm	±20	±25	±50
-10 ~ +60	○	○	○	○
-20 ~ +70	△	○	○	○
-40 ~ +85	×	△	△	○

* ○ : Available △ : Conditional X : Not available

* Inclusive of calibration @ 25 °C, operating temperature range, input voltage variation, load variation, aging (1st year), shock, and vibration