

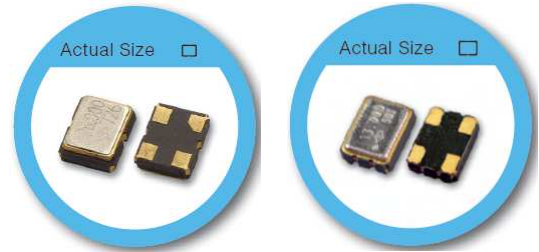
Extended Operating Temperature Range Crystal Oscillator OX/OY Series - 3.2 x 2.5 / 2.5 x 2.0 mm SMD Crystal Oscillator

FEATURE

- Extended Industrial Operating Temperature Range -40°C ~+125°C.
- Tight symmetry (45 to 55%) available.
- Operation voltage : 1.8V, 2.5V, 3.3V.
- Tri-state enable/disable.

TYPICAL APPLICATION

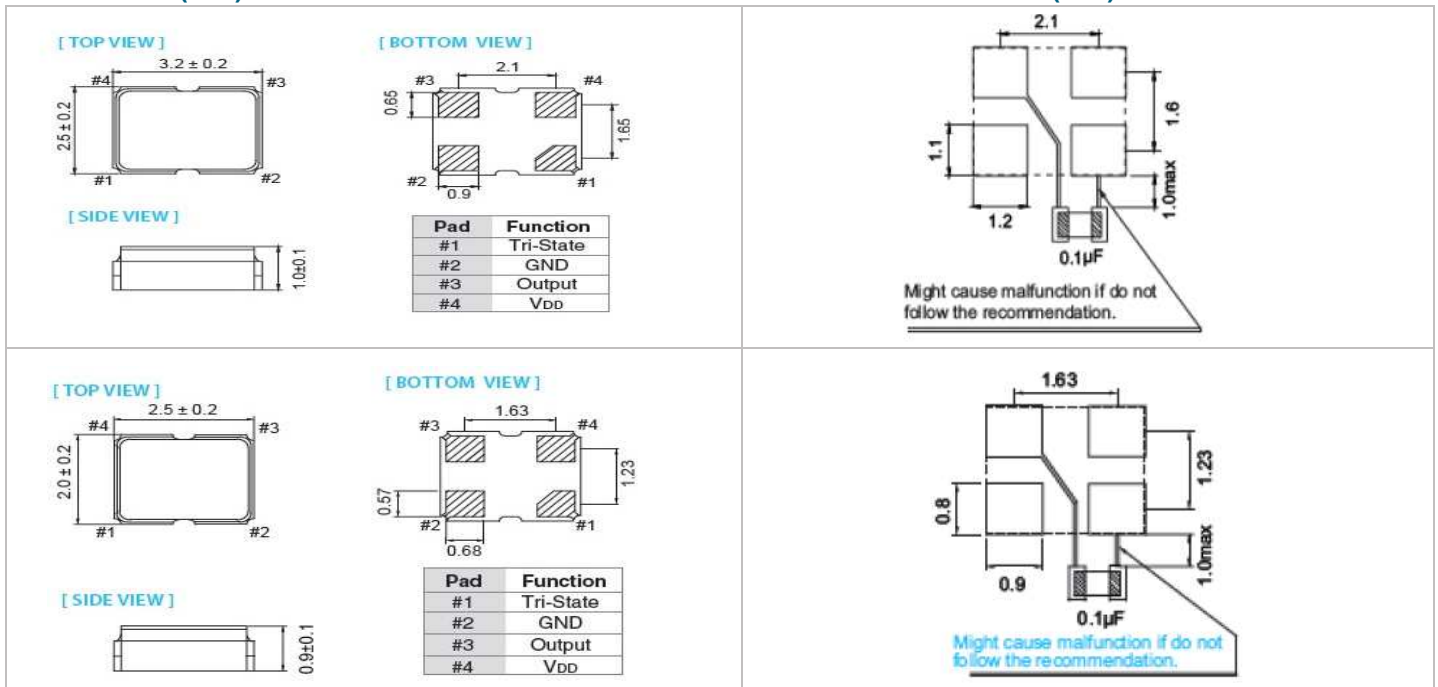
- Extreme environment applications.
- Oil drilling, geothermal.
- Commercial space, car/aircraft engine, aerospace & military.
- Industrial instrumentation.
- Automotive.



RoHS Compliant Standard

DIMENSION (mm)

SOLDER PAD LAYOUT (mm)



ELECTRICAL SPECIFICATION

Parameter	3.3V		2.5V		1.8V		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	1.25	100	1.25	100	1.25	100	MHz
Supply Current	F0 ≤ 80MHz		F0 ≤ 80MHz		F0 ≤ 80MHz		mA
	F0 > 80MHz		F0 > 80MHz		F0 > 80MHz		
Duty Cycle	45	55	45	55	45	55	%
Output Level (CMOS)	Output High (Logic "1")		Output High (Logic "1")		Output High (Logic "1")		V
	Output Low (Logic "0")		Output Low (Logic "0")		Output Low (Logic "0")		
Transition Time: Rise/Fall Time+	--	50	--	50	--	50	nSec
Start Time	--	2	--	2	--	2	mSec
Tri-State(Input to Pin 1)	Enable (High voltage or floating)		Enable (High voltage or floating)		Enable (High voltage or floating)		V
	Disable (Low voltage or GND)		Disable (Low voltage or GND)		Disable (Low voltage or GND)		
Absolute Clock Period Jitter	--	40	--	40	--	40	pSec
RMS Phase Jitter (integrated 12kHz ~ 20MHz)	--	1	--	1	--	1	pSec
Aging (@25°C 1st year)	--	±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
Packing: Tape & Reel, 3000pcs per Reel

FREQ.STABILITY vs. TEMP.RANGE

Temp. (°C)	ppm		
	±30	±40	±50
-40~+85	O	O	O
-40~+105	△	O	O
-40~+125	X	△	O

* O: Standard △:Conditional X: Not available

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