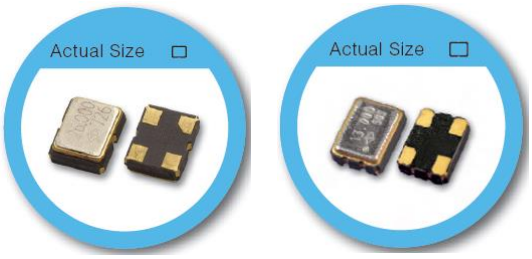
Enhanced Stability Crystal Oscillator

OX-A/OY-A Series - 3.2 x 2.5 / 2.5 x 2.0 mm SMD Crystal Oscillator

TAITIEN
Our Performance, Your Reputation



FEATURE

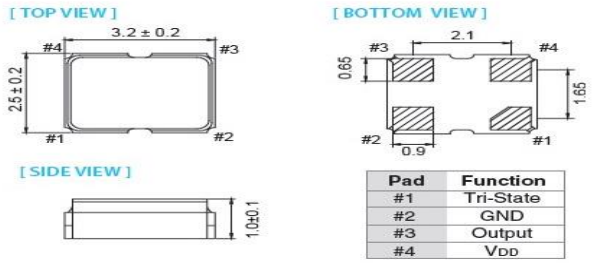
- Tight Tolerance: ±3 ppm accuracy @25°C, ±5ppm over -40°C to +85°C
- LVCMOS Output Logic
- Tight symmetry (45 to 55%) available.
- Operation voltage: 1.8V, 2.5V, 3.3V.
- Tri-state enable/disable.
- Femto second phase jitter and -145dBc/Hz at 10kHz offset

TYPICAL APPLICATION

- Wireless Connectivity
- Video Distribution

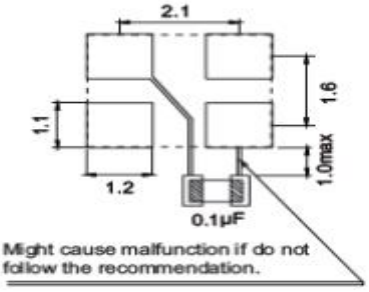
RoHS Compliant Standard

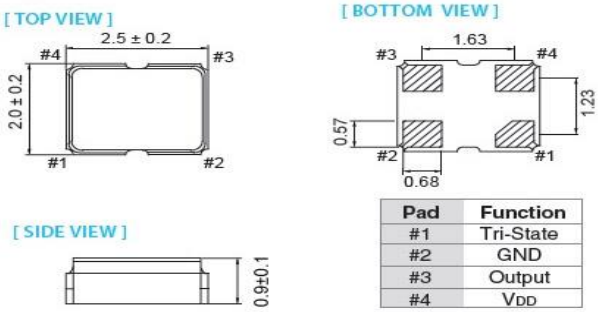
DIMENSION (mm)



Pad	Function
#1	Tri-State
#2	GND
#3	Output
#4	VDD

SOLDER PAD LAYOUT (mm)





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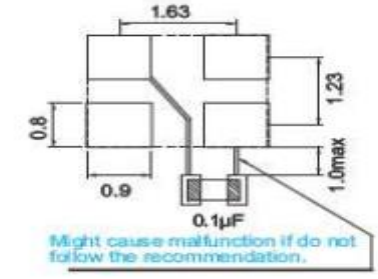

ELECTRICAL SPECIFICATION

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	19	60	19	60	19	60	MHz
Supply Current 19 ≦FO≦60MHz	--	10	--	7	--	5	mA
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+		8		8		8	nSec
Start Time		5		5		5	mSec
Tri-State(Input to Pin 1) Enable (High voltage or floating)	0.7VDD		0.7VDD		0.7VDD		V
Disable (Low voltage or GND)		0.3VDD		0.3VDD		0.3VDD	
RMS Phase Jitter (integrated 12kHz ~ 20MHz)		1		1		1	pSec
Phase Noise @ 26MHz 10 Hz		-80		-80		-80	dBc/Hz
100 Hz		-110		-110		-110	dBc/Hz
1 kHz		-130		-130		-130	dBc/Hz
10 kHz		-145		-145		-145	dBc/Hz
Aging (@25°C 1st year)		±1		±1		±1	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

ppm / Temp. (°C)	±5	±10	±15
-10~+60	O	O	O
-20~+70	△	O	O
-40~+85	X	O	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