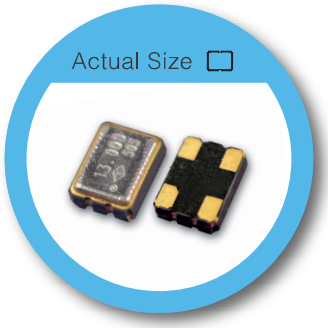
TAITIEN
Our Performance, Your Reputation

OX Type
3.2 x 2.5 mm SMD Crystal Oscillator



RoHS Compliant

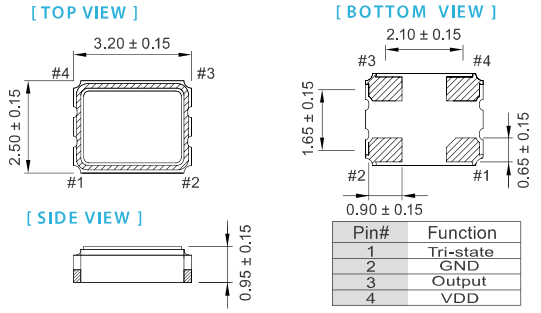
FEATURE

- Typical 3.2 x 2.5 x 0.95 mm ceramic SMD package.
- Tight symmetry (45 to 55%) available.
- Operation voltage: 1.8V, 2.5V, 3.3V
- Tri-state enable/disable

TYPICAL APPLICATION

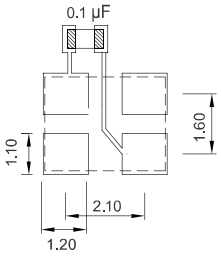
- WLAN/WiMAX
- Mobile Phone
- DSC, Set-top Box, HDTV

DIMENSION (mm)



Pin#	Function
1	Tri-state
2	GND
3	Output
4	VDD

SOLDER PAD LAYOUT (mm)



To ensure optimal oscillator performance, place a by-pass capacitor of 0.1µF as close to the part as possible between Vdd and GND pads.

ELECTRICAL SPECIFICATION

Parameter	3.3 V		2.5 V		1.8 V		unit
	Min.	Max.	Min.	Max.	Min.	Max.	
Supply Voltage Variation (V_{DD}) ±10%	2.97	3.63	2.25	2.75	1.62	1.98	V
Frequency Range	1.25	125	1.25	125	1.25	125	MHz
Standard Frequency	24, 26, 32, 38.4, 40						
Supply Current 1.25 MHz ≦ Fo < 100 MHz	–	15	–	10	–	7	mA
100 MHz ≦ Fo ≦ 125 MHz	–	25	–	20	–	12	
Duty Cycle	45	55	45	55	45	55	%
Output Level (CMOS) Output High (Logic "1")	2.97	–	2.25	–	1.62	–	V
Output Low (Logic "0")	–	0.33	–	0.25	–	0.18	
Transition Time:Rise/Fall Time+							
1.25 MHz ≦ Fo < 20 MHz	–	4		4	–	5	nSec
20 MHz ≦ Fo < 80 MHz	–	3	–	3	–	4	
80 MHz ≦ Fo ≦ 125 MHz	–	3	–	3	–	4	
Start Time	–	2	–	2	–	2	mSec
Tri-State(Input to Pin 1) Enable (High voltage or floating)	2.31	–	1.75	–	1.26	–	V
Disable (Low voltage or GND)	–	0.99	–	0.75	–	0.54	
Period Jitter(Pk-Pk)	–	40	–	40	–	40	pSec
RMS Phase Jitter (Integrated 12 kHz ~ 20 MHz)	–	1	–	1	–	1	pSec
Standby Current	–	10	–	10	–	10	µA
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 V_{DD}, 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

Note: not all combination of options are available. Other specifications may be available upon request.