

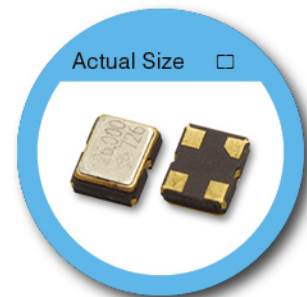
OY Type 2.5 x 2.0 mm SMD Crystal Oscillator

FEATURE

- Typical 2.5x2.0x0.9 mm ceramic SMD package.
- Tight symmetry (45 to 55%) available.
- Operation voltage: 1.8V, 2.5V, 3.3V
- Tri-state enable/disable

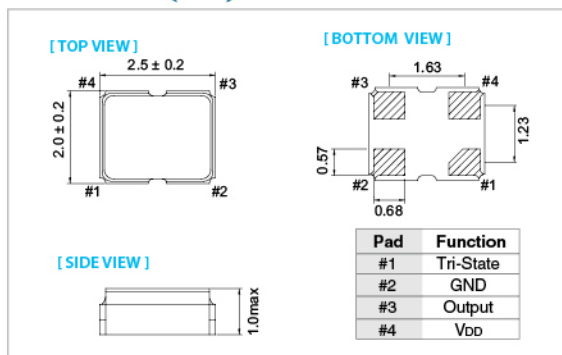
TYPICAL APPLICATION

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

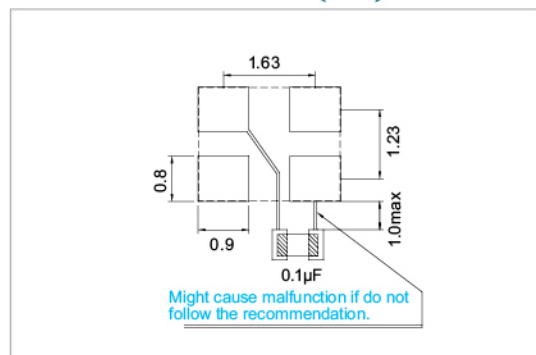


RoHS Compliant Standard

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	50	1	50	1	50	MHz
Standard Frequency	24, 26, 40						
Supply Current	—	15	—	10	—	7	mA
Duty Cycle	45	55	45	55	45	55	%
Output Level (CMOS)							V
Output High (Logic "1")	90%VDD	—	90%VDD	—	90%VDD	—	
Output Low (Logic "0")	—	10%VDD	—	10%VDD	—	10%VDD	
Transition Time:Rise/Fall Time ⁺							nSec
1MHz ≤ Fo < 20MHz	—	3	—	4	—	5	
20MHz ≤ Fo < 50MHz	—	2	—	3	—	4	
Start Time	—	2	—	2	—	2	mSec
Tri-State(Input to Pin 1)							V
Enable (High voltage or floating)	0.7 VDD	—	0.7 VDD	—	0.7 VDD	—	
Disable (Low voltage or GND)	—	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 (@ 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	±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