

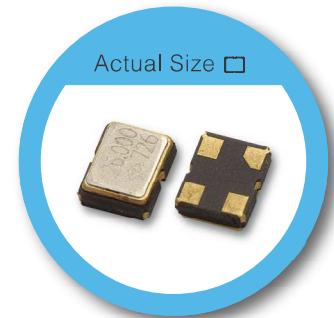
## OY Type 2.5 x 2.0 mm SMD Crystal Oscillator

### FEATURE

- Typical 2.5 x 2.0 x 0.85 mm ceramic SMD package.
- Tight symmetry (45 to 55%) available.
- Operation voltage: 1.8V, 2.5V, 3.3V
- Tri-state enable/disable

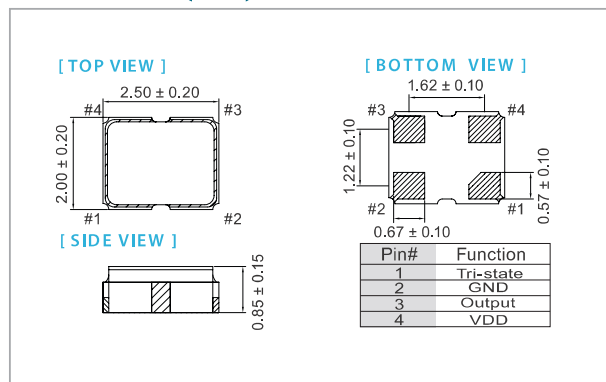
### TYPICAL APPLICATION

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

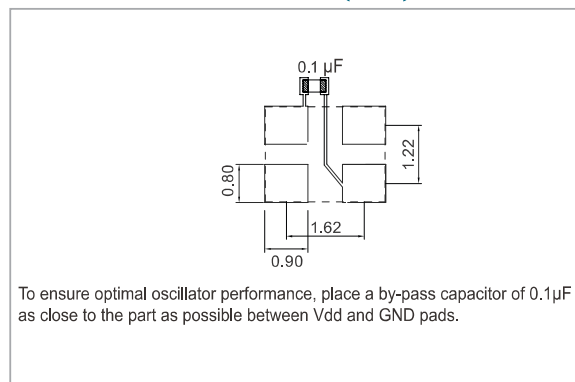


RoHS Compliant

### 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)	VDD-10%	VDD+10%	VDD-10%	VDD+10%	VDD-10%	VDD+10%	V
Frequency Range	1.25	125	1.25	125	1.25	125	MHz
Standard Frequency	24, 26, 30, 40						
Supply Current	–	15	–	10	–	7	mA
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 <sup>+</sup>							
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.

<sup>+</sup> 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	×	○	○
-40 ~ +125	×	×	○

\* ○: Available △: Conditional X: Not available

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

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

Specifications subject to change without notice.

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