

OY Type

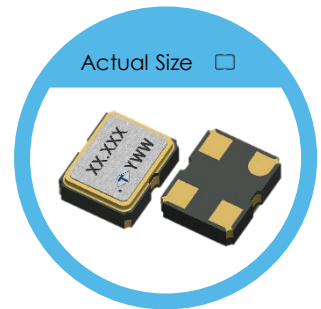
2.5 x 2.0 mm SMD Crystal Oscillator

FEATURES

- Conforms to AEC-Q200
- Typical 2.5 x 2.0 x 0.81 mm Ceramic SMD Package
- Tight Symmetry (45 to 55%) Available
- Operation Voltage: 1.8V, 2.5V, 3.3V
- Tri-State Enable/Disable

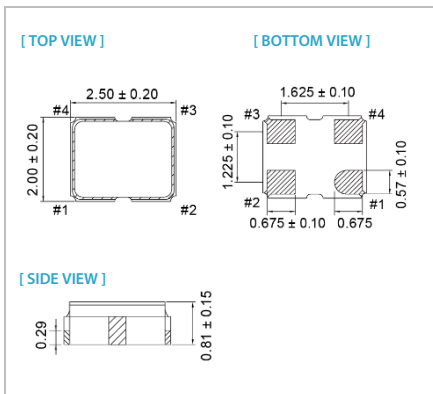
TYPICAL APPLICATION

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

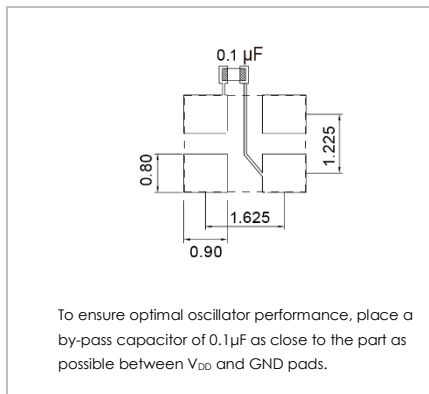


RoHS Compliant

DIMENSION (mm)



SOLDER PAD LAYOUT (mm)



PIN FUNCTION (mm)

PIN#	FUNCTION
1	Tri-State
2	GND
3	Output
4	V _{DD}

ELECTRICAL SPECIFICATION

Parameter	3.3V		2.5V		1.8V		Unit	Test Condition
	Min.	Max.	Min.	Max.	Min.	Max.		
Supply Voltage Variation (V _{DD})	V _{DD} - 5%	V _{DD} + 5%	V _{DD} - 5%	V _{DD} + 5%	V _{DD} - 5%	V _{DD} + 5%	V	
Frequency Range	1.25	125	1.25	125	1.25	125	MHz	
Standard Frequency	24, 26, 30, 40						MHz	Standard frequencies are frequencies which the crystal has been designed and does not imply a stock position.
Supply Current	At 15pF Load		10 MHz ≤ Fo < 20 MHz		20 MHz ≤ Fo < 80 MHz			
	No Load Condition		1.25 MHz ≤ Fo < 10 MHz		10 MHz ≤ Fo < 20 MHz			
			20 MHz ≤ Fo < 80 MHz		80 MHz ≤ Fo < 125 MHz			
Duty Cycle	45	55	45	55	45	55	%	
Output Level	Output High		2.25		1.62		V	
	Output Low		0.33		0.18		V	
Transition Time: Rise/Fall Time	1.25 MHz ≤ Fo < 10 MHz		3		4		5 nSec	
	10 MHz ≤ Fo < 20 MHz		3		3		4 nSec	
	20 MHz ≤ Fo < 80 MHz		3		3		4 nSec	
	80 MHz ≤ Fo < 125 MHz		3		3		4 nSec	
Startup Time	2		2		2		mSec	
Tri-State (Input to Pin 1)	Enable (High Voltage or Floating)		1.75		1.26		V	
	Disable (Low Voltage or GND)		0.99		0.54		V	
Output Loading	15		15		15		pF	
Standby Current (@-40°C to 85°C)	10		10		10		µA	
Standby Current (@-40°C to 125°C)	20		20		20		µA	
Period Jitter (pk-pk)	40		40		40		pSec	
RMS Phase Jitter (Integrated 12 kHz~20 MHz)	1		1		1		pSec	
Aging (@25°C, 1 st year)	±3		±3		±3		ppm	
Storage Temp. Range	-55		+125		-55		+125 °C	

FREQ. STABILITY vs. TEMP. RANGE

Temp.(°C)	ppm	±20	±25	±50
-10 ~ +60	○	○	○	○
-20 ~ +70	△	○	○	○
-40 ~ +85	X	△	○	○
-40 ~ +125	X	X	△	△

○: 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.
 Specifications subject to change without notice.