

PX Type

3.2 x 2.5 mm SMD Crystal Oscillator

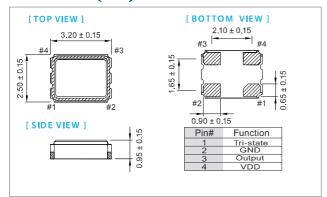
FEATURE

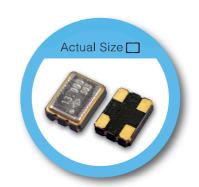
- Typical 3.2 x 2.5 x 0.95mm ceramic SMD package.
- Tight symmetry (45 to 55%) available.
- Operation voltage: 1.8V, 2.5V, 3.3V
- Tri-state enable/disable

TYPICAL APPLICATION

- Computer Peripherals
- Set-top Box , HDTV
- DSC, PDA

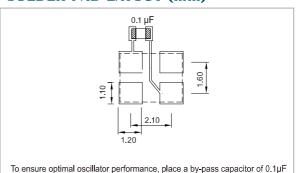
DIMENSION (mm)





RoHS Compliant

SOLDER PAD LAYOUT (mm)



To ensure optimal oscillator performance, place a by-pass capacitor of $0.1\mu F$ 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.	unit
Supply Voltage Variation (VDD) ±10%	2.97	3.63	2.25	2.75	1.62	1.98	V
Frequency Range	1	200	1	166	1	100	MHz
VDD Sensitivity (±10 %)	-2	2	-2	2	-2	2	ppm
Supply Current 1 MHz ≤ Fo < 30 MHz	_	10	_	8	_	6	
30 MHz ≦ Fo < 75 MHz	_	15	_	10	_	8	
75 MHz ≦ Fo < 133 MHz	_	20	_	15	_	12	mA
133 MHz ≦ Fo < 166 MHz	_	22	_	15	_	_	
166 MHz ≦ Fo ≦200 MHz	_	25	_	_	_	_	
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 MHz ≦ Fo < 10 MHz	_	3	_	4	_	5	
10 MHz ≦ Fo	-	2	_	3	_	4	nSec
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)							
Specific Frequency"	_	40	_	40	_	40	
Others	-	200	_	200	_	200	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.

FREQ. STABILITY vs. TEMP. RANGE

Temp. (°C)	±20	±25	±50
-10 ~ +60	0	0	0
- 20 ~ +70	\triangle	0	0
-40 ~ ±85	~		

^{*} \bigcirc : Available \triangle :Conditional X: Not available

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

⁺ Transition times are measured between 10% and 90% of VDD, with an output load of 15pF.

[&]quot; Specific frequency including 4.0, 6.0, 8.0, 12.0, 13.0, 16.0, 19.2, 20.0, 24.0, 26.0, 32.0, 38.4 and 40.0MHz

^{*} Inclusive of calibration @ 25 °C, operating temperature range, input voltage variation, load variation, aging (1st year), shock, and vibration