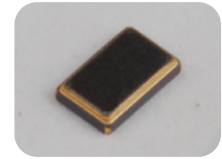


# SMD OSCILLATOR

## Features

- Typical 3.2x2.5x1.2mm ceramic SMD package.
- Tight symmetry (45 to 55%) available.
- Low phase jitter.
- Operation voltage : 1.8V, 2.5V, 3.3V.
- Packing : Tape & Reel, 1000/2000/3000pcs per Reel.



## Application

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

RoHS Compliance

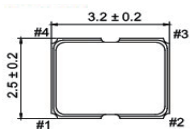
## Specifications

Parameter	3.3V		2.5V		1.8V		Unit
	Min.	Max.	Min.	Max.	Min.	Max.	
Supply Voltage Variation (VDD) 10%	2.97	3.63	2.25	2.75	1.71	1.89	V
Frequency Range	1.0	60	1.0	60	1.0	60	MHz
Standard Frequency	24, 26, 32, 38.4, 40						
Supply Current	-	20	-	15	-	10	mA
Duty Cycle	45	55	45	55	45	55	%
Output Level(CMOS)							V
Output High (Logic"1")	90%VDD	-	90%VDD	-	95%VDD	-	
Output Low (Logic"0")	-	10%VDD	-	10%VDD	-	5%VDD	
Transition Time : Rise/Fall Time							nSec
1MHz ≤ Fo < 20MHz	-	5	-	5	-	6	
20MHz ≤ Fo < 40MHz	-	4	-	4	-	5	
Start Time	-	10	-	10	-	10	mSec
Tri-State(Input to Pin 1)							V
Output Active	0.7 VDD	-	0.7 VDD	-	0.7 VDD	-	
Output in High Impedance State	-	0.3 VDD	-	0.3 VDD	-	0.3 VDD	
Phase Jitter (12KHz~20MHz)	-	1.0	-	1.0	-	1.0	pS
Standard Current	-	10	-	10	-	10	μA
Aging	-	±3	-	±3	-	±3	ppm
Storage Temp. Range	-55	125	-55	125	-55	125	°C

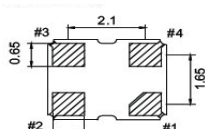
Standard frequencies are frequencies which the crystal has been designed and does not imply a stock position.  
 +Transition times are measured between 10% and 90% of VDD, with an output load of 15pF.

### DIMENSION (Unit: mm)

[TOP VIEW]



[BOTTOM VIEW]

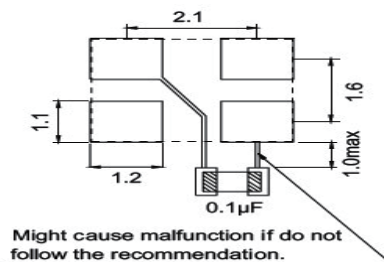


[SIDE VIEW]



Pad	Function
#1	Tri-State
#2	GND
#3	Output
#4	VDD

### SOLDER PAD LAYOUT(mm)



### FREQ.STABILITY vs. TEMP. RANGE

Temp.	PPM		
	±20	±25	±50
-10 ~ +60°C	○	○	○
-20 ~ +70°C	○	○	○
-40 ~ +85°C	△	△	○

\*○:Standard △:Available(case by case) X:Not available