

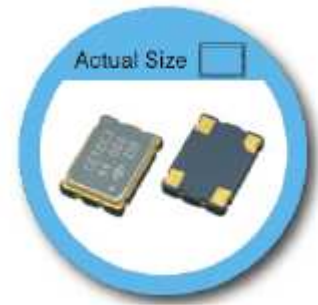
OC Type 7.0 x 5.0 mm SMD Crystal Oscillator

FEATURE

- Typical 7.0 x 5.0 x 1.3 mm ceramic SMD package.
- Output frequency up to 200 MHz
- Tri-state enable/disable

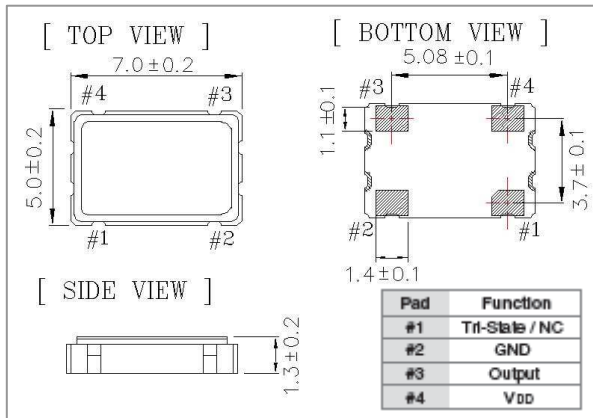
TYPICAL APPLICATION

- xDSL, WLAN, Fiber/10G-Bit Ethernet
- Notebook, PDA
- PC main board, VGA card

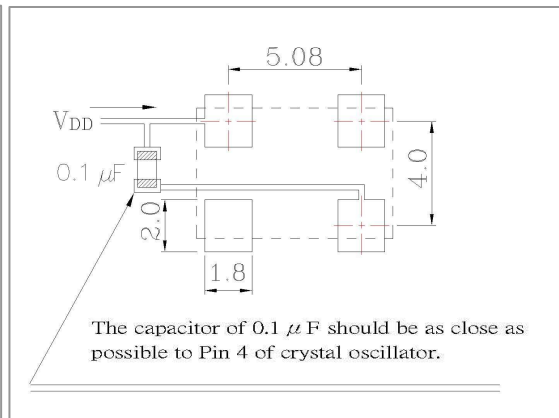


RoHS Compliant Standard

DIMENSION (mm)



SOLDER PAD LAYOUT (mm)



ELECTRICAL SPECIFICATION

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	1.62	1.98	V
Frequency Range	0.0137	166	0.0137	133	0.0137	125	MHz
Standard Frequency	2.048,25,26,27,50,66.667,100,125						MHz
Supply Current							
13.7KHz \leq F0 \leq 70KHz	-	1	-	0.5	-	0.1	mA
0.3125MHz \leq F0 \leq 35.328MHz (A1)	-	10	-	8	-	7	
30MHz \leq F0 < 75MHz	-	20	-	18	-	15	
75MHz \leq F0 < 133MHz	-	35	-	30	-	25	
133MHz \leq F0	-	45	-	40	-	-	
Output Level (CMOS)	90%VDD	-	90%VDD	-	90%VDD	-	V
Output High (Logic "1")	-	10%VDD	-	10%VDD	-	10%VDD	
Output Low (Logic "0")	-	-	-	-	-	-	
Transition Time: Rise/Fall Time*							
13.7KHz \leq F0 \leq 70KHz	-	50	-	50	-	50	nSec
0.3125MHz \leq F0 < 100MHz	-	5	-	5	-	5	
100MHz \leq F0	-	3	-	3	-	3	
Start Time	-	5	-	5	-	5	mSec
Output Drive Capability (CL)	-	15	-	15	-	15	pF
Tri-State (Input to Pin1) Enable (High voltage or floatig)	0.7VDD	-	0.7VDD	-	0.7VDD	-	V
Disable (Low voltage or GND)	-	0.3VDD	-	0.3VDD	-	0.3VDD	
Absolute Clock Period Jitter	-	40	-	40	-	40	pSec
RMS Phase Jitter (Integrated 12KHz~20MHz)	-	1	-	1	-	1	pSec
Standby Current	-	10	-	10	-	10	μ A
Aging (@ 25°C 1st year)	-	\pm 3	-	\pm 3	-	\pm 3	ppm
Storage Temp. Range	-55	125	-55	125	-55	125	$^{\circ}$ 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. • Output waveform CMOS only.

Packing: Tape & Reel, 1000/3000pcs per Reel.

FREQ. STABILITY vs. TEMP. RANGE

Temp. ($^{\circ}$ C)	ppm	\pm 20	\pm 25	\pm 50
-10 - +60		○	○	○
-20 - +70		△	○	○
-40 - +85		△	○	○

* ○: Available △: Conditional X: Not available

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