

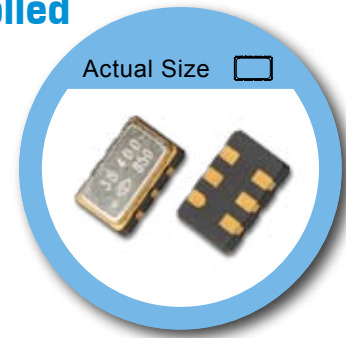
# 5.0 x 3.2mm SMD PECL/LVDS Voltage Controlled Crystal Oscillator – VW Type

## FEATURE

- Typical 5.0 x 3.2 x 1.2 mm 6 pads ceramic SMD package.
- Tight symmetry (45 to 55%) available.
- Packing: Tape & Reel, 1000/2000/3000/5000pcs per Reel.

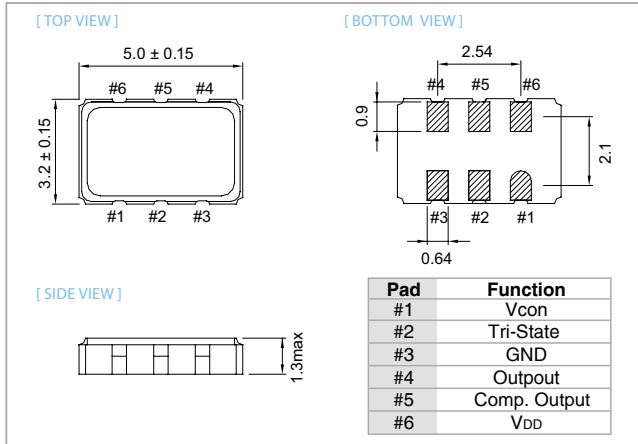
## TYPICAL APPLICATION

- Set-top Box, HDTV
- Wimax/WLAN
- xDSL/ VoIP, Cable modem

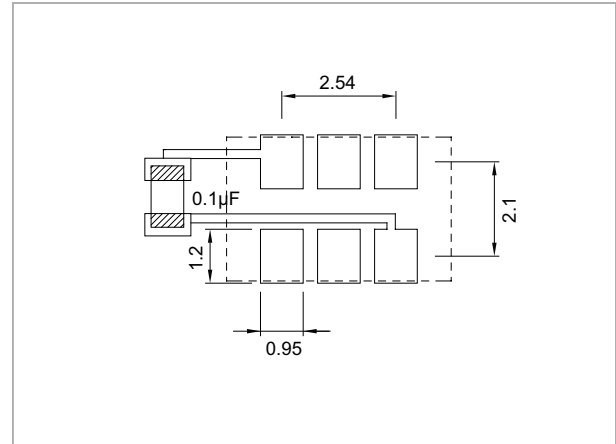


**RoHS Compliant Standard**

## DIMENSION (mm)



## SOLDER PAD LAYOUT (mm)



## ELECTRICAL SPECIFICATION

Parameter	PECL		LVDS		Unit
	3.3 V		3.3 V		
	Min.	Max.	Min.	Max.	
Supply Voltage Variation (VDD) 5%	3.135	3.465	3.135	3.465	V
Frequency Range	60	175	60	175	MHz
Standard Frequency	153.6 , 155.52 , 156.25				MHz
Absolute Pulling Range (APR)	±50	-	±50	-	ppm
Control Voltage Range	0.3	3.0	0.3	3.0	V
Supply Current	60MHz ≤ Fo ≤ 175MHz		-		mA
Output Level	Output High (Logic"1")		-		V
	2.275	-	-	1.6	
	Output Low (Logic"0")		-		V
	-	1.68	0.9	-	
Transition Time: Rise/Fall Time+ Start Time	-		1.0		nSec
	-		3		mSec
Tri-State ( Input to Pin 2)	Output Active		-		V
	0.75 VDD	-	0.75 VDD	-	
	Output in High Impedance State		-		V
	-	0.15 VDD	-	0.15 VDD	
Linearity	-	10	-	10	%
Modulation Bandwidth (BW)	20	-	20	-	KHz
Input Impedance	5	-	5	-	Mohm
RMS Phase Jitter	Fo < 100MHz		-		pSec
	-		1.0		
	100MHz ≤ Fo < 125MHz		-		pSec
	-		0.7		
	125MHz ≤ Fo < 150MHz		-		pSec
	-		0.5		
	125MHz ≤ Fo ≤ 175MHz		-		pSec
	-		0.3		
Aging	-	±3	-	±3	ppm
Storage Temp. Range	-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.

## FREQ. STABILITY vs. TEMP. RANGE

Temp (°C)	ppm	±25	±50
-10 ~ +60	○	○	○
-20 ~ +70	○	○	○
-40 ~ +85	×	○	○

\* ○: Standard △: Available (case by case) ×: Not available  
 \* Inclusive of calibration @ 25 °C, operating temperature range, input voltage variation, load variation, aging (1<sup>st</sup> year), shock, and vibration.