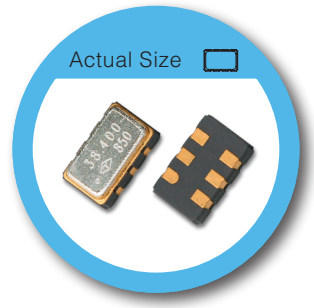
5.0 x 3.2mm SMD PECL/LVDS Voltage Controlled Crystal Oscillator – VW Type



RoHS Compliant Standard

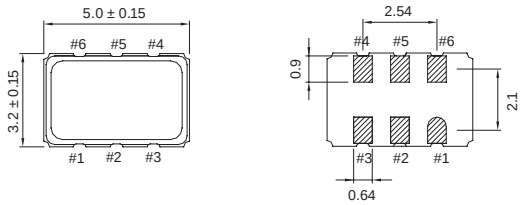
FEATURE

- 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

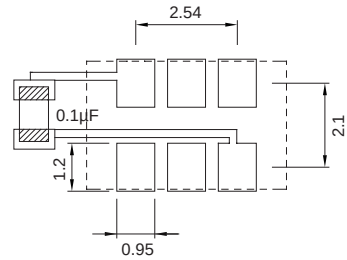
- Set-top Box, HDTV
- Wimax/WLAN
- xDSL/ VoIP, Cable modem

DIMENSION (mm)



Pad	Function
#1	Vcon
#2	Tri-State
#3	GND
#4	Outpout
#5	NC
#6	VDD

SOLDER PAD LAYOUT (mm)



ELECTRICAL SPECIFICATION

Parameter	PECL 3.3 V Min.	PECL 3.3 V Max.	LVDS 3.3 V Min.	LVDS 3.3 V Max.	unit
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				
Absolute Pulling Range (APR)	±50	–	±50	–	ppm
Control Voltage Range	0.3	3.0	0.3	3.0	V
Supply Current 60 MHz ≦ Fo ≦ 175 MHz		100		75	mA
Output Level					
Output High (Logic "1")	2.275	–	–	1.6	V
Output Low (Logic "0")	–	1.68	0.9	–	
Transition Time: Rise/Fall Time+	–	1.0	–	1.0	nSec
Start Time	–	3	–	3	mSec
Tri-State (input to Pin 2)					
Enable	0.7 VDD	–	0.7 VDD	–	V
Disable	–	0.3 VDD	–	0.3 VDD	
Linearity	–	10	–	10	%
Modulation Bandwidth (BW)	20	–	20	–	KHz
Input Impedance	5	–	5	–	MΩ
RMS Phase Jitter					
Fo < 100MHz	–	1.0	–	1.0	pSec
100MHz ≦ Fo < 125MHz	–	0.7	–	0.7	
125MHz ≦ Fo < 150MHz	–	0.5	–	0.5	
150MHz ≦ Fo ≦ 175MHz	–	0.3	–	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 20% and 80% of VDD.

FREQ. STABILITY vs. TEMP. RANGE

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

* ○: Available △:Conditional X: Not available
* Inclusive of calibration @ 25 °C, operating temperature range, input voltage variation, load variation, aging (1st year), shock, and vibration