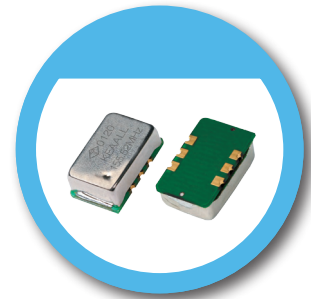


14.2 x 9.3 mm SMD PECL/LVDS Voltage Controlled Crystal Oscillator– VK Type



RoHS Compliant Standard

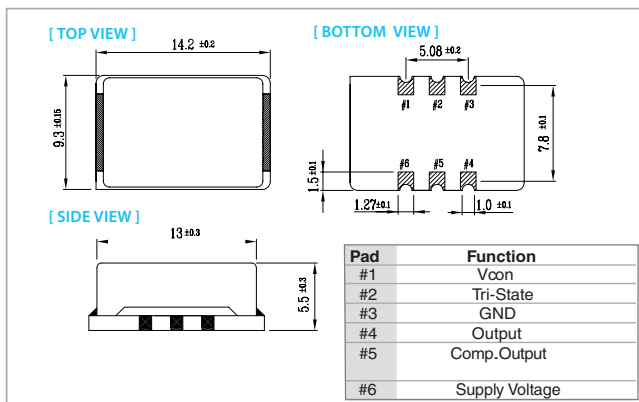
FEATURE

- Typical 14.2 X 9.3 x 5.5 mm 6 pads ceramic SMD package.
- Tight symmetry (45 to 55%) available.
- Wide frequency control range.
- Complementary Output.
- Packing: Tape & Reel, 500pcs per Reel.

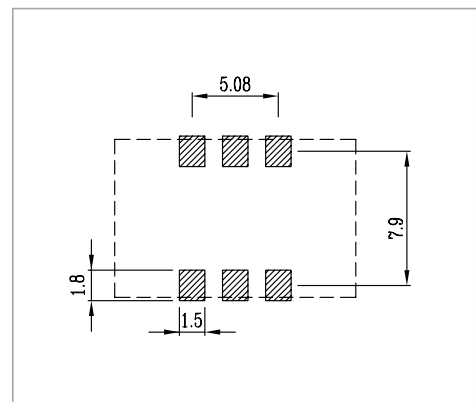
TYPICAL APPLICATION

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

DIMENSION (mm)



SOLDER PAD LAYOUT (mm)



ELECTRICAL SPECIFICATION

Parameter	PECL				LVDS				Unit
	3.3 V		2.5V		3.3 V		2.5V		
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	
Supply Voltage Variation (VDD) 5%	3.135	3.465	2.375	2.625	3.135	3.465	2.375	2.625	V
Frequency Range	1.5	200	65	200	1.5	200	65	200	MHz
Standard Frequency	77.76, 106.25, 122.88, 125, 155.52, 156.25, 200								
Absolute Pulling Range (APR)	±50	–	±50	–	±50	–	±50	–	ppm
Control Voltage Range	0.3	3.0	0	2.5	0.3	3.0	0	2.5	V
Supply Current 1.5 MHz ≤ Fo < 65 MHz	–	75	–	75	–	45	–	45	mA
65 MHz ≤ Fo ≤ 200 MHz	–	100	–	100	–	80	–	80	mA
Output Level Output High (Logic"1")	2.275	–	1.475	–	–	1.6	–	1.6	V
Output Low (Logic"0")	–	1.68	–	1.095	0.9	–	0.9	–	V
Transition Time: Rise/Fall Time+	–	1.0	–	1.0	–	1.0	–	1.0	nSec
Start Time	–	3	–	3	–	3	–	3	mSec
Tri-State (input to Pin 2, Enable Low)									
Enable	–	0.3 VDD	–	0.3 VDD	–	0.3 VDD	–	0.3 VDD	V
Disable	0.7 VDD	–	0.7 VDD	–	0.7 VDD	–	0.7 VDD	–	V
Linearity	–	10	–	10	–	10	–	10	%
Modulation Bandwidth (BW)	25	–	25	–	25	–	25	–	KHz
Input Impedance	50	–	50	–	50	–	50	–	KΩ
RMS Phase Jitter (Integrated 12 KHz-20 MHz)									
Fo < 100 MHz	–	1	–	1	–	1	–	1	pSec
100 MHz ≤ Fo < 125 MHz	–	0.7	–	0.7	–	0.7	–	0.7	
125 MHz ≤ Fo < 150 MHz	–	0.5	–	0.5	–	0.5	–	0.5	
150 MHz ≤ Fo	–	0.3	–	0.3	–	0.3	–	0.3	
Aging	–	±3	–	±3	–	±3	–	±3	ppm
Storage Temp. Range	-55	125	-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.

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