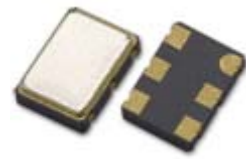


Series CV7
7.0 x 5.0 mm SMD SEAM SEALED OSCILLATOR

CV7 Type
7.0 x 5.0 mm SMD Voltage Controlled
Crystal Oscillator



FEATURE

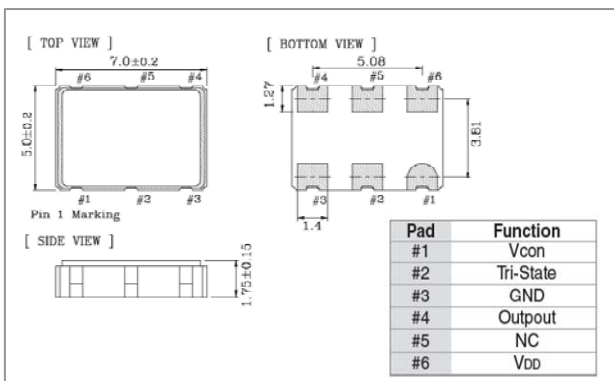
- Typical 7.0 x 5.0 x 1.6 mm 6 pads ceramic SMD package.
- Tight symmetry (45 to 55%) available.
- Tri-state enable/disable

TYPICAL APPLICATION

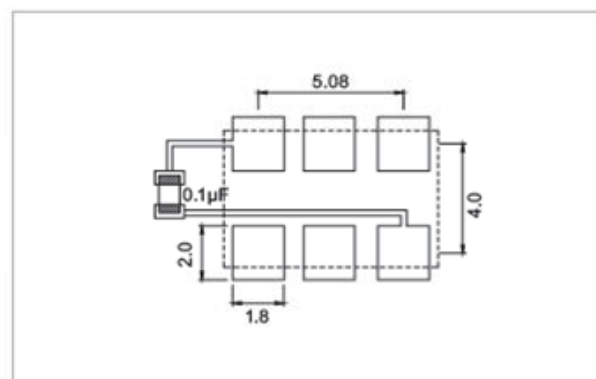
- Set-top Box, HDTV
- Wimax/WLAN
- Xdsl/VoIP, Cable modem

RoHS Compliant Standard

DIMENSION (mm)



SOLDER PAD LAYOUT (mm)



ELECTRICAL SPECIFICATION

Parameter	5.0V		3.3V		Unit
	Min.	Max.	Min.	Max.	
Supply Voltage Variation (VDD) 10%	4.5	5.5	2.97	3.63	V
Frequency Range	1.5	50	1.5	200	MHz
Standard Frequency	10,20,25,27,32,768,35,328,38,88,61,44,122,88				MHz
Absolute Pulling Range (APR)	±50	-	±50	-	ppm
Control Voltage Range	0.5	4.5	0.3	3.0	V
Supply Current	1.5MHz ≤ F0 < 20 MHz		-		mA
	20MHz ≤ F0 < 50 MHz		15		
	50MHz ≤ F0 ≤ 80 MHz		30		
	80MHz < F0 < 160 MHz		35		
	160MHz ≤ F0 ≤ 200 MHz		40		
Output Level(CMOS)	-		50		
Output High (Logic "1")	90%VDD	-	90%VDD	-	V
Output Low (Logic "0")	-	10%VDD	-	10%VDD	
Transition Time : Rise/ Fall Time*	-		-		nSec
	1.5MHz ≤ F0 < 20 MHz		4		
	20MHz ≤ F0 < 50 MHz		3		
	50MHz ≤ F0 ≤ 80 MHz		2		
Start Time	-		5		mSec
Tri-State(Input to Pin 2)	-		-		V
Enable(High voltage or floating)	0.7VDD	-	0.7VDD	-	
Disable(Low voltage or GND)	-	0.3VDD	-	0.3VDD	
Absolute Clock Period Jitter	-	40	-	40	pSec
RMS Phase Jitter(Integrated 12 KHz~20 MHz)	-	1	-	1	pSec
Linearity	-	10	-	10	%
Modulation Bandwidth(BW)	-		-		KHz
	1.5MHz ≤ F0 ≤ 175 MHz		15		
	175MHz < F0 ≤ 200 MHz		45		
Input Impedance	-		-		KΩ
	1.5MHz ≤ F0 < 100 MHz		2000		
	100MHz ≤ F0 ≤ 200 MHz		50		
Phase Noise @35.328 MHz	-		-		dBc/Hz
	100 Hz		-80		
	1 KHz		-130		
	10 KHz		-140		
Aging (@25°C 1st year)	-		±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

<http://www.wtlcrystals.com> Email:WTL@wtlcrystals.com Tel:86-755-82677582 Fax:86-755-82679302

Series CV7
7.0 x 5.0 mm SMD SEAM SEALED OSCILLATOR

+ Transition times are measured between 10% and 90% of VDD, with an output load of 15pF.

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

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

Specifications subject to change without notice