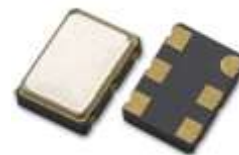


Series CV7
7.0 x 5.0 mm SMD SEAM SEALED OSCILLATOR

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

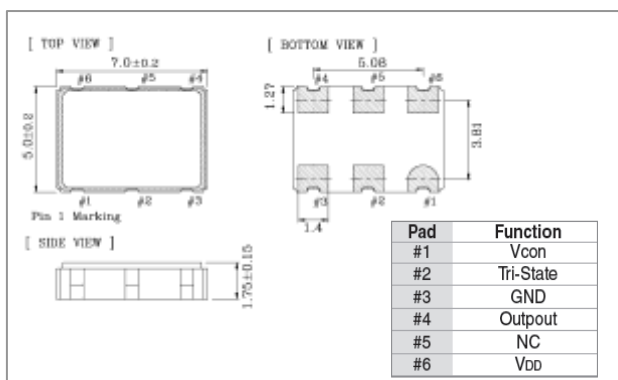


TYPICAL APPLICATION

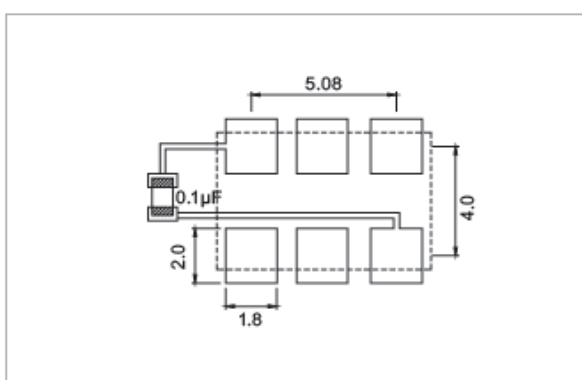
- Set-top Box,HDTV
- Wimax/WLAN
- Xdsl/VoIP,Cable modem

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)	-		-		V
Output High (Logic "1")	90%VDD	-	90%VDD	-	
Output Low (Logic "0")	-	10%VDD	-	10%VDD	
Transition Time : Rise/ Fall Time ⁺	-		-		nSec
1.5MHz ≤ F0 < 20 MHz	-	4	-	5	
20MHz ≤ F0 < 50 MHz	-	3	-	4	
50MHz ≤ F0 ≤ 80 MHz	-	2	-	3	
Start Time	-	5	-	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	-	15	-	
175MHz < F0 ≤ 200 MHz	45	-	45	-	
Input Impedance	-		-		KΩ
1.5MHz ≤ F0 < 100 MHz	2000	-	2000	-	
100MHz ≤ F0 ≤ 200 MHz	50	-	50	-	
Phase Noise @35.328 MHz	-		-		dBc/Hz
100 Hz	-	-80	-	-80	
1 KHz	-	-130	-	-130	
10 KHz	-	-140	-	-140	
Aging (@25°C 1st year)	-	±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.

Series CV7

7.0 x 5.0 mm SMD SEAM SEALED OSCILLATOR

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