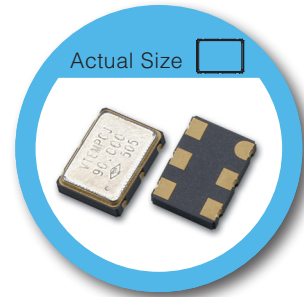


7.0 x 5.0 mm SMD Voltage Controlled Crystal Oscillator – VT Type Multiplier



FEATURE

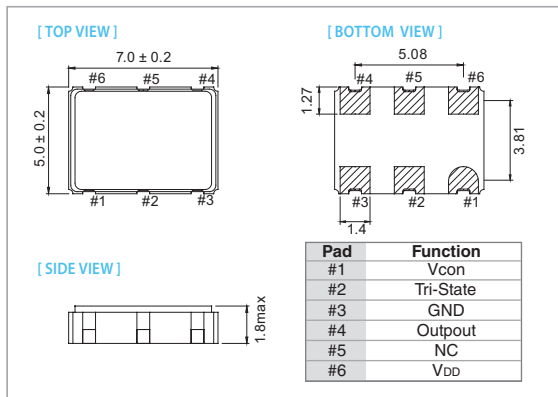
- Typical 7.0 x 5.0 x 1.6 mm 6 pads ceramic SMD package.
- Tight symmetry (45 to 55%) available.
- Packing: Tape & Reel, 1000/3000pcs per Reel.

TYPICAL APPLICATION

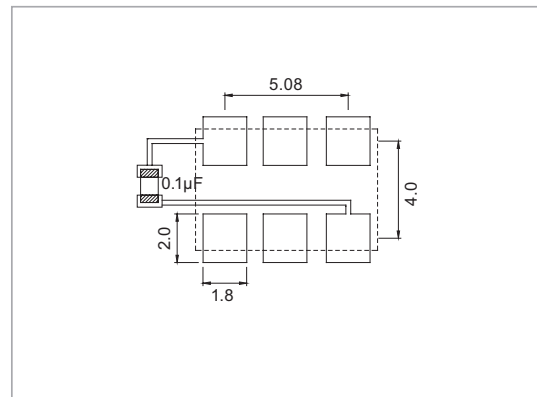
- Set-top Box, HDTV
- Wimax/WLAN
- xDSL/ VoIP, Cable modem

RoHS Compliant Standard

DIMENSION (mm)



SOLDER PAD LAYOUT (mm)



ELECTRICAL SPECIFICATION

Parameter	3.3 V		Unit
	Min.	Max.	
Supply Voltage Variation (VDD) 10%	2.97	3.63	V
Frequency Range	60	200	MHz
Absolute Pulling Range (APR)	±50	-	ppm
Control Voltage Range	0.3	3.0	V
Supply Current			
60 MHz ≤ Fo < 160 MHz	-	40	mA
160 MHz ≤ Fo ≤ 200 MHz	-	50	
Output Level (CMOS)			
Output High (Logic"1")	90% VDD	-	V
Output Low (Logic"0")	-	10% VDD	
Transition Time: Rise/Fall Time+			
60 MHz ≤ Fo ≤ 200 MHz	-	2	nSec
Start Time	-	2	mSec
Tri-State (Input to Pin 2)			
Enable	0.7 VDD	-	V
Disable	-	0.3 VDD	
Absolute Clock Period Jitter	-	150	pSec
RMS Phase Jitter (Integrated 12KHz-20MHz)	-	4	
Linearity	-	10	%
Modulation Bandwidth (BW)	25	-	KHz
Input Impedance	2000	-	KΩ
Aging	-	±3	ppm
Storage Temp. Range	-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