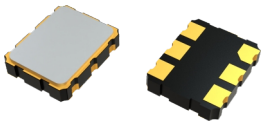
7.0 × 5.0 mm SMD HCSL Crystal Oscillator

Feature

- Typical 7.0 x 5.0 x 1.45 mm hermetically sealed ceramic package
- Very low jitter performance: Max. 0.5 pS RMS from 12KHz-20MHz
- Tight symmetry (45 to 55%) available
- Tri-state enable/disable
- High-speed current steering logic (HCSL) output



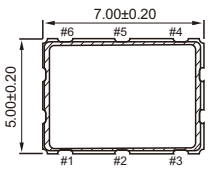
Electrical Specifications

Parameter		HCSL				Unit
		3.3V		2.5V		
		Min.	Max.	Min.	Max.	
Supply Voltage Variation		3.135	3.465	2.375	2.625	V
Frequency Range		25	175	25	175	MHz
Standard Frequency		100				MHz
Supply Current		-	50	-	50	mA
Output level	Output High	0.6	-	0.58	-	V
	Output Low	-	0.15	-	0.15	
Transition Time : Rise/Fall Time		-	0.5	-	0.5	nSec
Start Time		-	10	-	10	mSec
Tri-State (Input to Pin 1/2)	Enable	2.31	-	1.75	-	V
	Disable	-	0.99	-	0.75	
RMS Phase Jitter(integrated 12KHz ~ 20MHz)		-	0.5	-	0.5	pSec
Aging(@25 1st year)		-	±3	-	±3	ppm
Storage Temp. Range		-55	125	-55	125	°C

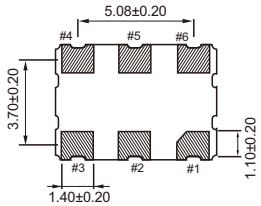
Standard frequencies are frequencies which the crystal has been designed and does not imply a stock position
.+ Transition times are measured between 20% and 80% of VDD.

Dimension(mm)

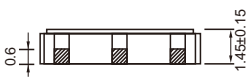
TOP VIEW



BOTTOM VIEW

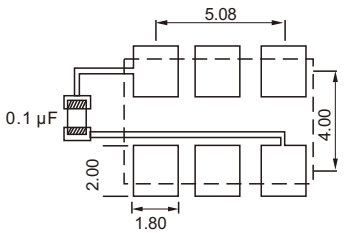


SIDE VIEW



PIN#	Function
1	NC/Tri-State
2	Tri-State/NC
3	GND
4	Output
5	Comp_Output
6	VDD

Solder Pad Layout(mm)



To ensure optimal oscillator performance, place a by-pass capacitor of 0.1 µF as close to the part as possible between Vdd and GND pads.

FREQ. STABILITY vs. TEMP. RANGE

Temp. (°C) \ ppm	±25	±50
-10 ~ +60	o	o
-20 ~ +70	o	o
-40 ~ +85	Δ	o
-40 ~ +125	x	o

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