

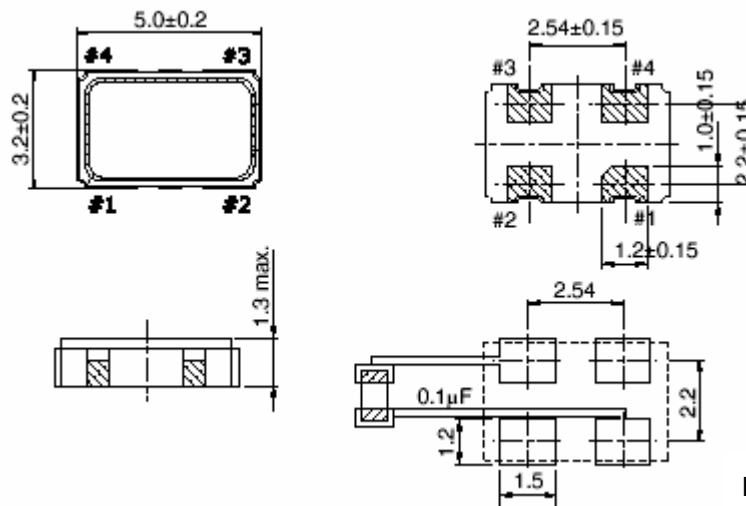
### Features

- HCMOS/TTL, 32.768KHz Oscillator Special Frequency
- Ceramic SMD Package, Seam sealed, 5x3.2x1.3mm
- 2.5V / 3.3V Operation
- RoHS Compliant

### Specification

Parameter	Characteristic
Frequency Range	<b>32.768KHz</b>
Frequency Stability	+/- 100ppm std. (See Table 4) Inclusive of Operating Temperature
Operating Temperature Range	0 ~ +70°C std. (See Table 5)
Storage Temperature Range	-55 ~ +125°C
Input Voltage	3.3Vdc +/- 10% std. (See Table 3)
Input Current	0.45mA typical, 1mA max
Output 0 Level (Vol)	0.33Vdc max
Output 1 Level (Voh)	2.97Vdc min
Symmetry (Duty Cycle)	40/60%@1/2Vdc std. (See Table 6)
Rise & Fall Time	200nS max
Tri-state (Input to Pin# 1)	Logic 1 or Open : Oscillation Logic 0 : High Impedance
Start Up Time	5mS max
Output waveform vs. Load	HCMOS-TTL / 15pF
Aging(at 25°C)	+/- 5ppm / year max

### Drawing



### Pin Connection

1. E/D or N.C
2. Ground
3. Output
4. Vcc

### Ordering Guide

Typical P/N : C53LH - 32.768K - 2 - 25 C S1 T -TR  
   1                  2                  3   4   5   6   7   8

<p><b>1. Package</b> C53LH = 5x3.2x1.3mm        (5x3.2mm Ceramic SMD Oscillator, KHz, HCMOS/TTL)</p> <p><b>2. Frequency range</b> : 32.768KHz Special Freq.</p> <p><b>3. Input Voltage</b> : 2 = 2.5V / 3 = 3.3V</p> <p><b>4. Frequency Stability</b>        00 : +/- 100ppm        50 : +/- 50ppm        25 : +/- 25ppm</p> <p><b>5. Operating Temperature Range</b>        A : 0~70℃        B : -20~70℃        C : -40~85℃        D : -10~70℃        * : The others</p> <p><b>6. Symmetry (Duty Cycle)</b>        S1 : 45/55% at 1/2Vdc        S2 : 40/60% at 1/2Vdc</p> <p><b>7. Pin#1 Connection</b>        T : Tri-state        Blank : No connection</p>	<p><b>8. Packing</b>        TR : Tape and Reel        BU : Bulk        TU : Tube</p>
--	--