



HC55D Series 3.3 V HCSL Clock Oscillators

January 2011



- Pletronics' HC55D Series is a quartz crystal controlled precision square wave generator with a HCSL output.
- The package is designed for high density surface mount designs.
- Low cost mass produced oscillator.
- Tape and Reel or cut tape packaging is available.
- 13 MHz to 220 MHz
- 3.2 x 5 mm LCC Ceramic Package
- Enable/Disable Function on pad 1
- Disable function includes low standby power mode
- Fundamental and 3rd Overtone Crystals used
- Low Jitter

Pletronics Inc. certifies this device is in accordance with the RoHS 6/6 (2002/95/EC) and WEEE (2002/96/EC) directives.

Pletronics Inc. guarantees the device does not contain the following:
 Cadmium, Hexavalent Chromium, Lead, Mercury, PBB's, PBDE's
 Weight of the Device: 0.09 grams
 Moisture Sensitivity Level: 1 As defined in J-STD-020D.1
 Second Level Interconnect code: e4

Absolute Maximum Ratings:

Parameter	Unit
V _{CC} Supply Voltage	-0.5V to +5.0V
V _i Input Voltage	-0.5V to V _{CC} + 0.5V
V _o Output Voltage	-0.5V to V _{CC} + 0.5V

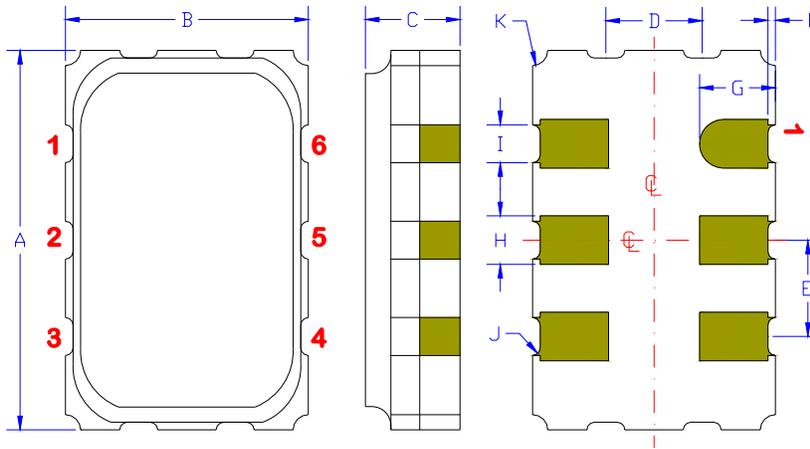
Thermal Characteristics

The maximum die or junction temperature is 155°C
 The thermal resistance junction to board is 30 to 50°C/Watt depending on the solder pads, ground plane and construction of the PCB.

SHENZHEN YIJIN ELECTRONICS CO: LTD TEL: 0755-27876565

18924600166 QQ: 857950243 <http://www.vc-tcxo.com>

Mechanical:



Contacts:

Gold 11.8 to 39.4 μ mches (0.3 to 1.0 μ m)
over
Nickel 50 to 350 μ mches (1.27 to 8.89 μ m)

¹ Typical dimensions

Not to Scale

	Inches	mm
A	0.197 \pm 0.006	5.00 \pm 0.15
B	0.125 \pm 0.006	3.20 \pm 0.15
C	0.053 max	1.35 max
D ¹	0.050	1.27
E ¹	0.050	1.27
F ¹	0.004	0.10
G ¹	0.039	1.00
H ¹	0.025	0.63
I ¹	0.020	0.50
J ¹	0.004R	0.10R
K ¹	0.008R	0.20R

Pad	Function	Note
1	Output Enable/Disable	When this pad is not connected the oscillator shall operate. When this pad is <0.30 volts, the output will be inhibited (high impedance state.) Recommend connecting this pad to V _{CC} if the oscillator is to be always on.
2	No connect	There is no internal connection to this pad
3	Ground (GND)	
4	Output	Both outputs must be terminated and biased for proper operation. The ideal termination is 50 ohms connected to ground.
5	Output*	
6	Supply Voltage (V _{CC})	Recommend connecting appropriate power supply bypass capacitors as close as possible.

Layout and application information

For Optimum Jitter Performance, Pletronics recommends:

- a ground plane under the device
- no large transient signals (both current and voltage) should be routed under the device
- do not layout near a large magnetic field such as a high frequency switching power supply
- do not place near piezoelectric buzzers or mechanical fans.