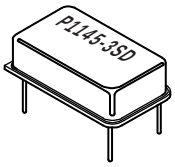
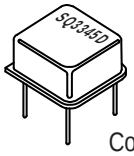
Pletronics, Inc.
19013 36th Ave. West • Suite H • Lynnwood, WA 98036, USA

High Frequency Thru-Hole





- Full Size or Half Size Metal Thru-Hole Clock Oscillator
- CMOS with Enable/ Disable, 3rd Overtone Crystal Used
- Low Jitter

70.00 MHz – 170.00 MHz
Consult factory for higher frequencies

Standard Specifications

Overall Frequency Stability	± 50 PPM is standard, but ± 25 PPM and ± 20 PPM over Operating Temp. Range also available
Operating Temperature Range	0 to +70°C is standard, but can be extended to – 40 to +85°C for certain frequencies
Supply Voltage (Vcc)	5.0 volts and 3.3 volts available
Symmetry (Duty Cycle)	40/60 to 60/40% is standard, but 45/55% at 50% of Vcc is also available (see Waveform 1)
Logic Levels	Logic "1" 90% of Vcc MIN; Logic "0" 10% of Vcc MAX
Jitter	1 pS RMS maximum, from 12 kHz to 20 MHz from carrier
Output Load	Standard load is 15pF maximum, see Test Circuit 3 (consult factory for heavier loads)
Enable/Disable Option (E/D)	Output enabled when Pin #1 is open or at Logic "1"; Output disabled when Pin #1 is at Logic "0".

Frequency Range (MHz)	Supply Current Icc (mA) w/ 15pF load		Rise and Fall Time Tr & Tf (nS) w/ 15pF load	
	Typical	Maximum	Typical	Maximum
70.000 – 79.999	40.0	45.0	2.0	3.0
80.000 – 110.000	75.0	80.0	0.5	1.0
110.001 – 119.999	80.0	90.0	0.5	1.0
120.000 – 170.000	90.0	95.0	0.5	1.0

Part Numbering Guide

Packaging
Tube or
on Pads

SQ33 45 D V -- 70.0M - 30
P11 45 - 3SD V -- 70.0M - 30

Model
P11xx-3SD (Full Size)
SQ33xxD (Half Size)

Frequency Stability
45 = ± 50 PPM
44 = ± 25 PPM
20 = ± 20 PPM

Special Specifications (choose all that apply)
Blank: Std Specs (5.0V ± 10%, 0 to +70°C, 40/60% Symmetry)
E: Extended Operating Temperature Range (- 40 to +85°C)
S: 45/55% Symmetry at 50% of Vcc
V: Supply Voltage of 3.3 volts ±10%

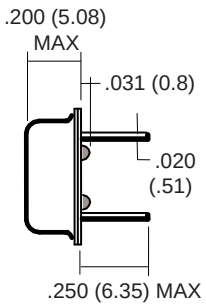
Frequency in MHz

Non-Std Output Load
Blank = 15 pF max, 30 = 30 pF max, 50 = 50 pF max

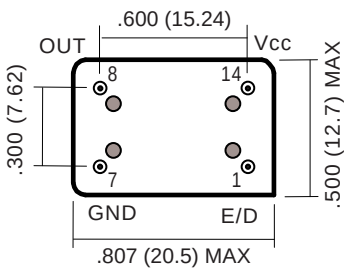
Consult factory for available frequencies and specs. Not all options available for all frequencies. A special part number may be assigned.
Frequency Stability is inclusive of frequency shifts due to calibration, temperature, supply voltage, shock, vibration and load

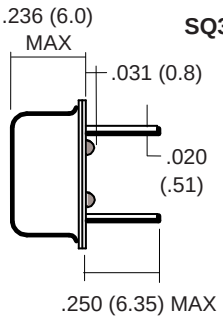
Mechanical: inches (mm) not to scale

Due to part size and factory abilities, part marking may vary from lot to lot and may contain our part number or an internal code.

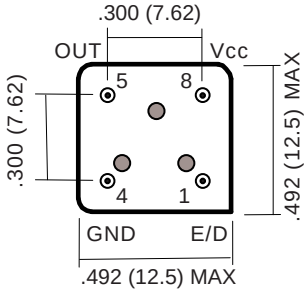


P11xx-3SD





SQ33xxD



Jan 2002