# SQ3345, SQ2245 CMOS Series

- SQ3345: CMOS with Enable/ Disable, SQ2245 without Enable/Disable
- Half Size (8 Pin DIP) Thru-Hole Metal Clock Oscillator



650 kHz - 69.999 MHz

### Standard Specifications

Overall Frequency Stability Operating Temperature Range Supply Voltage (Vcc) Symmetry (Duty Cycle)

Logic Levels
Output Load

SQ33: Enable/Disable Option (E/D)

± 50 PPM, ± 25 PPM, ± 20 PPM over Operating Temperature Range

0 to +70°C is standard, but can be extended to - 40 to +85°C for certain frequencies

5.0 volts and 3.3 volts available

40/60 to 60/40% is standard, but 45/55% at 50% of Vcc is also available (see Waveform 1)

Logic "1" 90% of Vcc MIN; Logic "0" 10% of Vcc MAX

Standard load is 15 pF (typ. 1 ASIC) maximum, see Test Circuit 3 (consult factory for heavier loads) Output enabled when Pin #1 is open or at Logic "1"; Output disabled when Pin #1 is at Logic "0".

Frequency Range	Max. Supply Current Icc (mA) w/ 15pF load		Rise and Fall Time Tr & Tf (nS) w/ 15pF load	
(MHz)				
	3.3V	5.0V	Typical	Maximum
0.650 - 10.000	7	10	3.0	4.0
10.001 - 25.999	10	20	2.5	3.5
26.000 - 34.999	15	25	2.5	3.5
35.000 - 50.000	20	30	2.5	3.5
50 001 - 69 999	25	35	2.5	3.5

# Part Numbering Guide

SQ33 45 E V -- 60.0M - XXX (Internal Code or blank)

Packaging Tubes Model
SQ33 with E/D
SQ22 no E/D
Frequency Stability  $45 = \pm 50 \text{ PPM}$   $44 = \pm 25 \text{ PPM}$ 

Frequency in MHz

Supply Voltage (Vcc)

Blank:  $5.0V \pm 10\%$ V:  $3.3 \text{ volts } \pm 10\%$ 

Special Specifications (choose all that apply)

Blank: Std Specs (0 to +70°C, 40/60% Symmetry) E: Extended Operating Temperature Range (- 40 to +85°C)

S: 45/55% Symmetry at 50% of Vcc

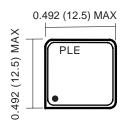
Consult factory for available frequencies and specs. Not all options available for all frequencies. A special part number may be assigned.

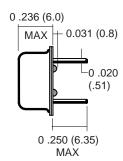
Frequency Stability is inclusive of frequency shifts due to calibration, temperature, supply voltage, shock, vibration and load

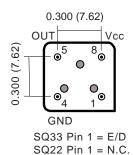
## Mechanical: inches (mm)

#### 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.







Nov 2006