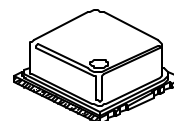
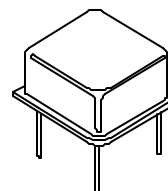




# SQ3300 SERIES

- CMOS COMPATIBLE WITH TRI -STATE OUTPUT
- LOWER RINGING NOISE OPTION AVAILABLE TO REDUCE EMI
- 8-PIN (HALF SIZE) THRU-HOLE OSCILLATORS IN METAL PACKAGE
- AVAILABLE IN SURFACE MOUNT CONFIGURATION



## STANDARD SPECIFICATIONS:

Frequency Range	650 kHz – 69.999 MHz (Consult factory for specific available frequencies)
Frequency Stability over Operating Temperature Range	$\pm 50$ PPM is standard, but $\pm 25$ PPM is also available.
Operating Temperature Range	0 - 70 °C is standard, but can be extended to -40 to +85°C.
Operable Supply Voltage (Vcc)	5 Volt $\pm 10\%$ is standard, but 3.3V $\pm 10\%$ is also available
Symmetry (Duty Cycle) (See next page for definition.)	40/60 - 60/40% is standard, but 45/55% symmetry at 50% of Vcc is also available.
Input Current (Icc) & Rise & Fall Time (Tr & Tf) & Jitter	Depends on frequency and output load. See next page.
Logic "1" & Logic "0" (See next page.)	90% of Vcc MIN.; 10% of Vcc MAX.
Tri-state Output	Normal output when pin #1 is open (no connection); Normal output when pin #1 is at logic "1"; High-impedance output when pin #1 is at logic "0".
Output Load	Can drive up to 50 pF load
Ringing Noise	Depends on frequency and output load. See EMI application note.
Packaging	33 parts per tube, SMD: Tape and Reel TBD

## PART NUMBERING GUIDE:

- The Pletronics part number for an SQ3300 series oscillator consists of the following 4 elements:

### 1. Overall Frequency Stability over Operating Temperature Range:

SQ3345:  $\pm 50$  PPM;  
SQ3344:  $\pm 25$  PPM

### 2. Optional Alphabet Designator for Special Requirement:

SQ3345: standard specifications;  
SQ3345E: operating temperature range of -40 to +85°C;  
SQ3345S: 45/55% symmetry at 50% of Vcc;  
SQ3345V: operates at Vcc = 3.3V;  
SQ3345N: lower ringing noise  
(There are other alphabet designators not listed here.)

### 3. Frequency of Operation in kHz or MHz

### 4. Optional Surface Mount Configuration – SMD

EXAMPLES: SQ3345V-50.000 MHz; SQ3345E-10.000 MHz, SQ3344N-10.000 MHz-SMD

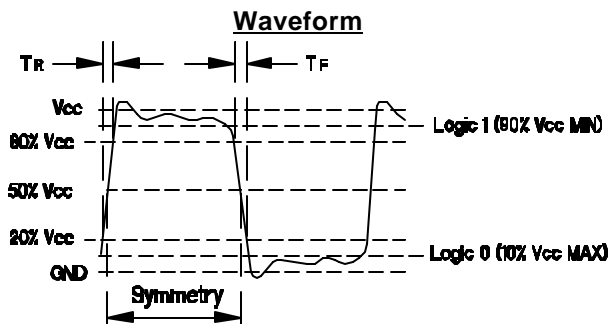
- When customer's requirements are non-standard, a special engineering part number will be assigned.

(continued)

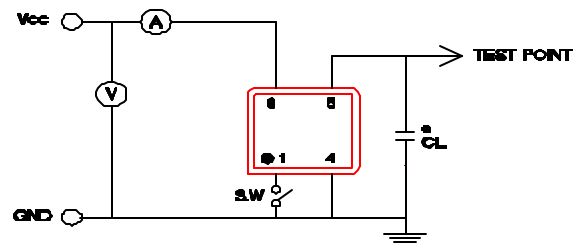
# SQ3300 SERIES

## Input Current (I<sub>cc</sub>), Rise and Fall time with 15pF Load & Jitter

Frequency Range (MHz)	I <sub>cc</sub> (mA)		Tr & Tf (nS)		Period Jitter RMS Values *contact factory	
	Typical	Maximum	Typical	Maximum	Typical	Maximum
0.650 – 10.000	6.5	10.0	3.0	4.0	*	*
10.0001 – 25.999	15.0	20.0	2.5	3.5	*	*
26.000 – 34.999	18.0	25.0	2.5	3.5	*	*
35.000 – 50.000	25.0	30.0	2.5	3.5	*	*
50.001 – 69.999	32.0	35.0	2.5	3.5	*	*

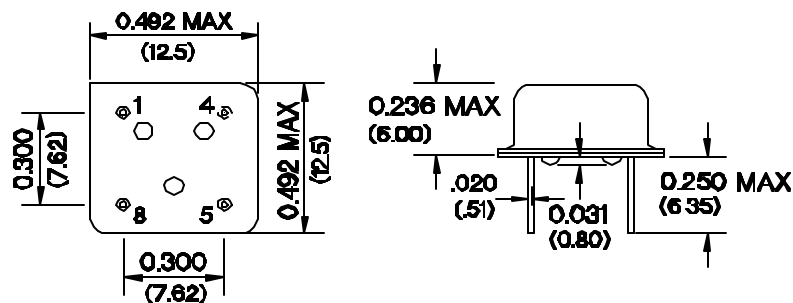


## Recommended Test Circuit with CMOS Load



\*CL (Capacitive Load): Includes the input capacitance of oscilloscope.

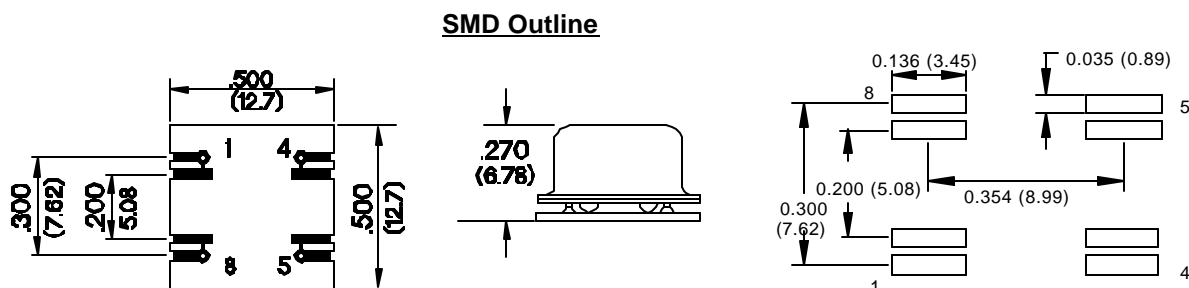
## Thru-Hole Package Outline (NOT TO SCALE):



INCHES (MILLIMETERS)

PIN CONNECTIONS	
PIN	CONNECTION
1	ENABLE/DISABLE INPUT
4	GROUND
5	OUTPUT
8	V <sub>cc</sub>

## Recommended Land Pattern



October 2000