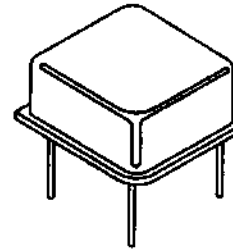




# SQ2200

THRU-HOLE OSCILLATORS IN METAL PACKAGE  
8-PIN (HALF SIZE) WITHOUT TRI-STATE OUTPUT



### STANDARD SPECIFICATIONS:

Frequency Range	250 kHz - 125.000 MHz
Frequency Stability over Operating Temperature Range	± 100 PPM is standard, but up to ± 25 PPM available.
Operating Temperature Range	0 - 70°C is standard, but can be extended to -40 to +85°C.
Input Voltage (Vcc)	5 Volt ± 10% is standard, but 3.3 Volt ± 10% available.
Input Current (Icc)	Depends on frequency and output load. See next page.
Symmetry (Duty Cycle) (See next page for definition.)	40/60 - 60/40% is standard, but 45/55% symmetry at 50% of Vcc (CMOS) or at Vcc=1.4V (TTL) is also available.
Rise and Fall Time (Tr & Tf) between 20% and 80% of Vcc	Depends on frequency and output load. See next page.
Logic "1" & Logic "0" (See next page.)	TTL: 2.4 V MIN.; 0.4V MAX. CMOS: 90% of Vcc MIN.; 10% of Vcc MAX.
Output Load	CMOS: can drive up to 50 pF load; TTL: up to 10 TTL loads +15 pF

### PART NUMBERING GUIDE:

- The Pletronics part number for an SQ2200 oscillator consists of the following 3 elements:

1. Overall Frequency Stability over Operating Temperature Range:

SQ2200-: ± 100 PPM;  
 SQ2245: ± 50 PPM;  
 SQ2244: ± 25 PPM

2. Optional Alphabet Designator for Special Requirement:

SQ2200: standard specifications;  
 SQ2200E: operating temperature range of -40 to +85°C;  
 SQ2200P: 45/55% symmetry at Vcc=1.4V (TTL);  
 SQ2200S: 45/55% symmetry at 50% of Vcc (CMOS).;  
 SQ2200V: operates at Vcc = 3.3V  
 (There are other alphabet designators not listed here.)

3. Frequency of Operation in kHz or MHz

EXAMPLES: SQ2200V-10.000 MHz; SQ2245E-10.000 MHz.

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

(continued)

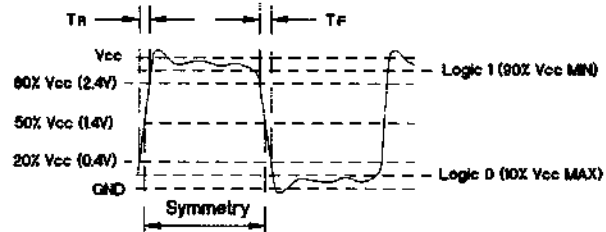
# SQ2200

THRU-HOLE OSCILLATORS IN METAL PACKAGE  
8-PIN (HALF SIZE) WITHOUT TRI-STATE OUTPUT

## Input Current (I<sub>cc</sub>) and Rise and Fall time with 20pF Load

## Waveform

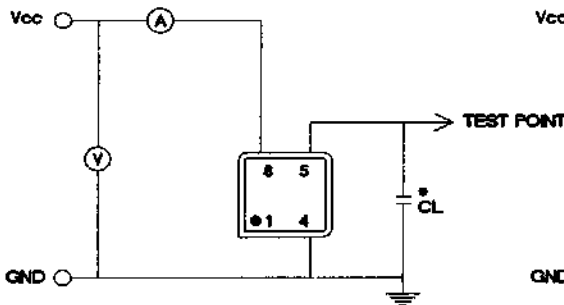
Freq. Range (MHz)	I <sub>cc</sub> (mA) Maximum	Tr & Tf (nS) Maximum
0.250-39.999	25	7
40.000-71.999	35	5
72.000-125.000	50	3



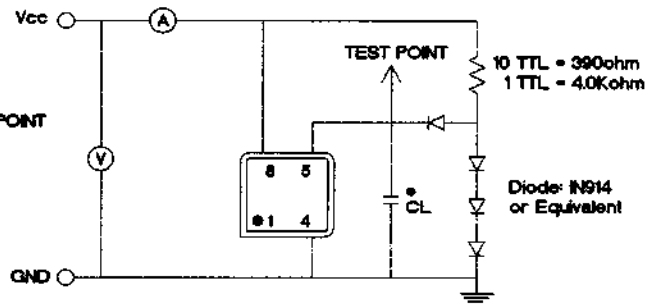
Voltage levels in ( ) refer to TTL level

## Recommended Test Circuit

### CMOS LOAD

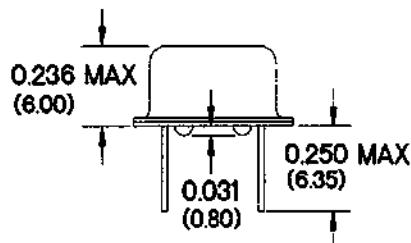
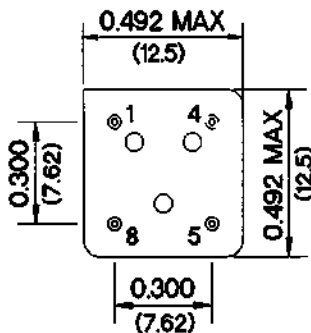


### TTL LOAD



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

## PACKAGE OUTLINE:



INCHES (MILLIMETERS)

PIN CONNECTIONS	
PIN	CONNECTION
1	N.C
4	GROUND
5	OUTPUT
7	V <sub>cc</sub>

April 1, 1997