ple | Pletronics, Inc.
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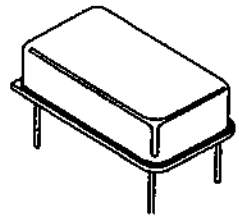
P1100-3S



THRU-HOLE OSCILLATORS IN METAL PACKAGE
14-PIN (FULL SIZE) WITH 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) 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: 2.4V MIN.; 0.4V MAX. CMOS: 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	CMOS: drive up to 50pF load; TTL: up to 10 TTL loads +15 pF

PART NUMBERING GUIDE:

- **The Pletronics part number for a P1100-3S oscillator consists of the following 3 elements:**

1. **Overall Frequency Stability over Operating Temperature Range:**
   P1100-3S: ± 100 PPM;
   P1145-3S: ± 50 PPM;
   P1144-3S: ± 25 PPM

2. **Optional Alphabet Designator for Special Requirement:**
   P1100-3S: standard specifications;
   P1100-3SE: operating temperature range of -40 to +85°C;
   P1100-3SP: 45/55% symmetry at Vcc=1.4V (TTL);
   P1100-3SS: 45/55% symmetry at 50% of Vcc (CMOS);
   P1100-3SV: operates at Vcc = 3.3V
   (There are other alphabet designators not listed here.)

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

EXAMPLES: P1100-3SV-10.000 MHz; P1145-3SE-10.000 MHz.

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

(continued)

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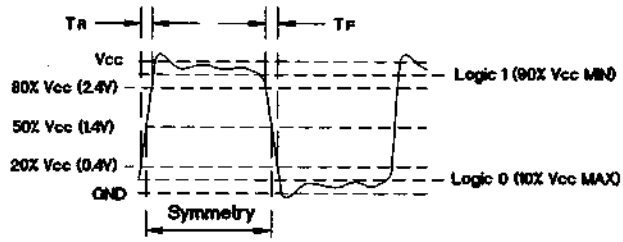
P1100-3S

THRU-HOLE OSCILLATORS IN METAL PACKAGE
14-PIN (FULL SIZE) WITH TRI-STATE OUTPUT

Input Current (Icc) and Rise and Fall time with 20pF Load

Freq. Range (MHz)	Icc (mA) Maximum	Tr & Tf (nS) Maximum
0.250-39.999	25	7
40.000-71.999	35	5
72.000-125.000	50	3

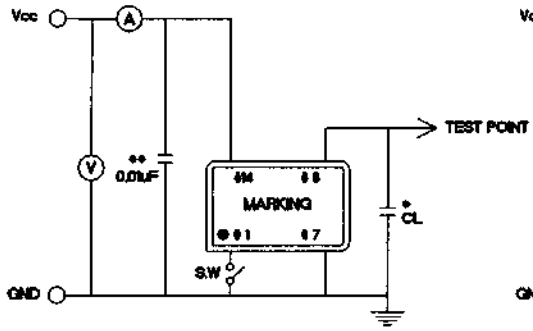
Waveform



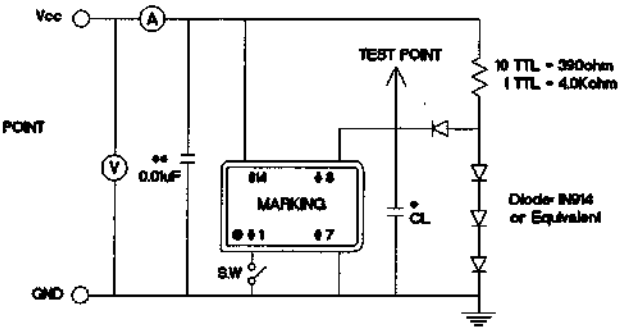
Voltage levels in ( ) refer to TTL level

Recommended Test Circuit

CMOS LOAD

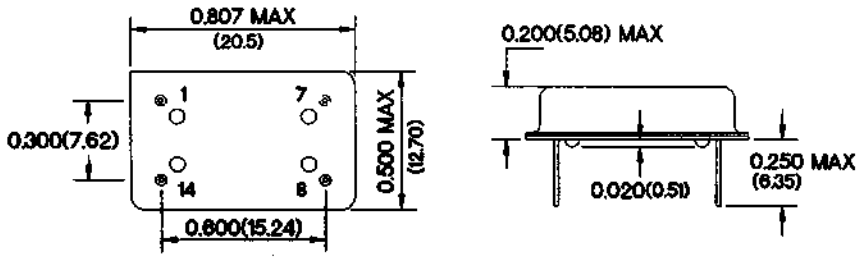


TTL LOAD



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

PACKAGE OUTLINE:



PIN CONNECTIONS	
PIN	CONNECTION
1	ENABLE/DISABLE INPUT
7	GROUND
8	OUTPUT
14	Vcc

INCHES (MILLIMETERS)

April 1, 1997

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