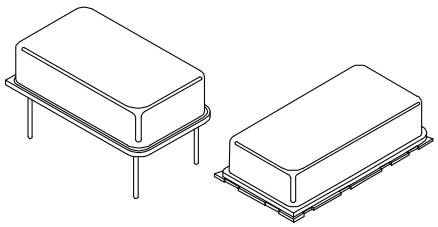
Pletronics, Inc.
19013 36th Ave. West • Suite H • Lynnwood, WA 98036, USA

P1145 Series

- Full Size (14 Pin DIP) Metal Clock Oscillator
- True TTL Output without Enable/Disable
- Lower EMI Due to Lower Ringing Noise (Overshoot/Undershoot)
- Available in Thru-Hole or Surface Mount Configuration



4.000 MHz – 60.000 MHz

Standard Specifications

Overall Frequency Stability	P1145: ± 50 PPM, P1144: ± 25 PPM over Operating Temperature Range
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 ± 10%
Symmetry (Duty Cycle)	40/60 to 60/40% is standard, but 45/55% at Vcc = 1.4 volts is also available (see Waveform 1)
Logic Levels	Logic "1" 2.4 volts MIN; Logic "0" 0.4 volts MAX
Output Load	Can drive up to 10 TTL loads + 15pF, see Test Circuit 4 (consult factory for heavier loads)
Ringing Noise	Depends on frequency and output load. See EMI application note

Frequency Range (MHz)	Supply Current Icc (mA)		Rise and Fall Time Tr & Tf (nS)	
	Typical	Maximum	Typical	Maximum
4.000 – 7.999	23.0	28.0	4.0	5.0
8.000 – 15.999	24.0	28.0	3.0	4.0
16.000 – 21.999	24.0	28.0	2.5	3.5
22.000 – 60.000	27.0	32.0	2.0	3.0

Part Numbering Guide

P11 45 E -- 60.0M - 30 - SMD

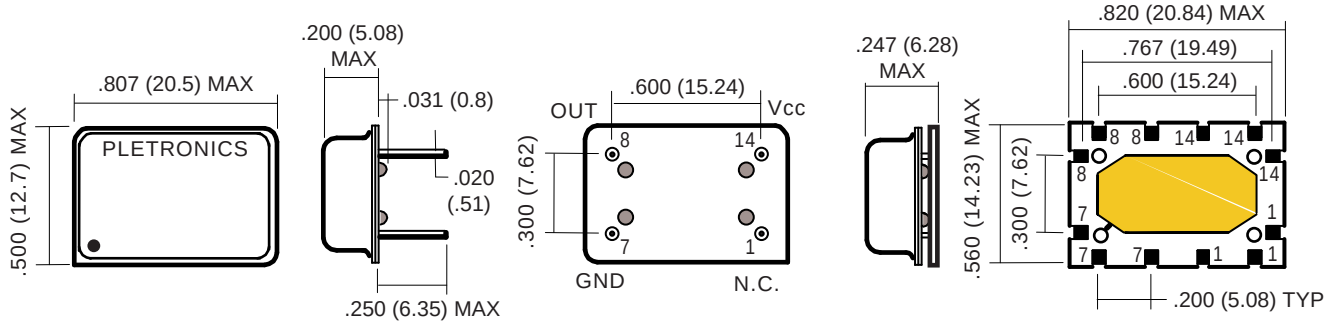
- P11 — Model
- 45 — Frequency Stability: 45 = ± 50 PPM, 44 = ± 25 PPM
- E — Special Specifications (choose all that apply): Blank: Std Specs (0 to +70 °C, 40/60% Symmetry); E: Extended Operating Temperature Range (- 40 to +85°C); P: 45/55% Symmetry at Vcc = 1.4 volts
- 60.0M — Frequency in MHz
- 30 — Non-Std Output Load: Blank = 15 pF max, 30 = 30 pF max, 50 = 50 pF max
- SMD — Surface Mount Option

Packaging: Tube or on Pads, SMD: Bulk

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 Surface Mount

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.



Solder pad layout may use any combination of pins 1, 7, 8 & 14 shown.
Recommended pad size is .12 (3.1) x .07 (1.8) typical.

Jan 2002