

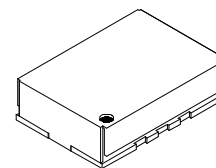


Pletronics, Inc.

19013 36th Ave. W, Suite H • Lynnwood, WA 98036 USA

Manufacturer of High Quality Frequency Control Products

PE3345B PECL Series



- 4 Pad Leadless Surface Mount Clock Oscillator
- Differential PECL Output with Enable/ Disable Function

10.00 MHz – 170.00 MHz

See PE1145T for higher frequencies

Standard Specifications

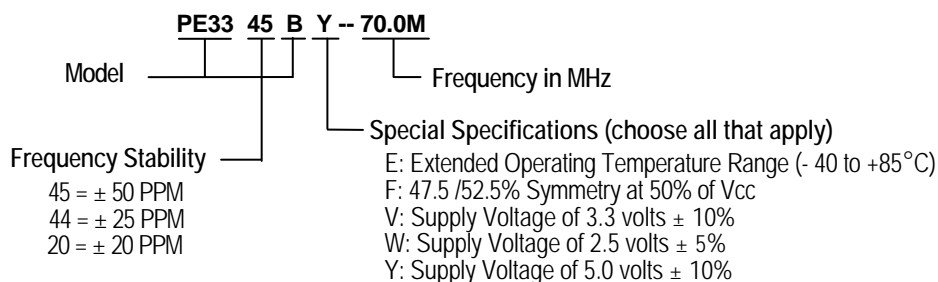
Overall Frequency Stability	± 50 PPM, ± 25 PPM, ± 20 PPM over Operating Temperature Range
Operating Temperature Range	0 to +80°C is standard, but can be extended to -40 to +85°C for certain frequencies
Supply Voltage (Vcc)	3.3 volts ± 10% standard, but 5.0 volts or 2.5 volts also available
Supply Current (Icc)	60 to 70 mA typical, 90 mA maximum for ≥ 70 MHz. For < 70 MHz, consult factory
Jitter	1 pS RMS maximum, from 12 kHz to 20 MHz from carrier for ≥ 70 MHz. For < 70 MHz, consult factory
Output Load	Output must be terminated into 50 ohms to (Vcc - 2.0 V). See Test Circuit 5 and Note 1.
Enable/Disable Option (E/D)	Output enabled when Pin 2 is open or at CMOS Logic "1"; Output disabled when Pin 2 is at CMOS Logic "0".
Output Waveform	Symmetry 45/55% to 55/45% at 50% of Vcc level standard, tighter symmetry available
PECL with Differential Output (see Waveform 2)	Tr & Tf 1.0 nS max (20 to 80%) for ≥ 70 MHz. For < 70 MHz, consult factory Logic "1" Vcc - 1.025 volts minimum Logic "0" Vcc - 1.620 volts maximum

Note 1:

In the typical PECL 100K logic output Voh is 2.35 volts and Vol is 1.60 volts at 3.3 Vcc. The center voltage of the PECL is therefore 1.975 volts. If a 50 ohm resistor is placed between the output and Vcc - 2 volts (1.3 volts), the current through the resistor is $(1.975 - 1.3) / 50 = 13.5$ mA. The same load can be simulated by a resistor of $147 \pm 1\%$ ohms to ground ($1.975 / 0.0135 = 146.29$ ohms). If additional load current is placed on the output, its load current must be subtracted from the 13.5 mA to calculate a new load resistor. Using similar calculations, use $274 \pm 1\%$ ohms to ground for 5.0V operation.

Part Numbering Guide

Packaging
Tray or
24mm tape,
16mm pitch



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.

