



PVB, PVM PECL VCXO Series

- Differential PECL Output with Enable/Disable
- 6 Pad Leadless Surface Mount or 4 Lead Thru-Hole PECL Voltage Controlled Xtal Oscillator

1.00 MHz – 650.00 MHz
Consult factory for higher frequencies

Standard Specifications

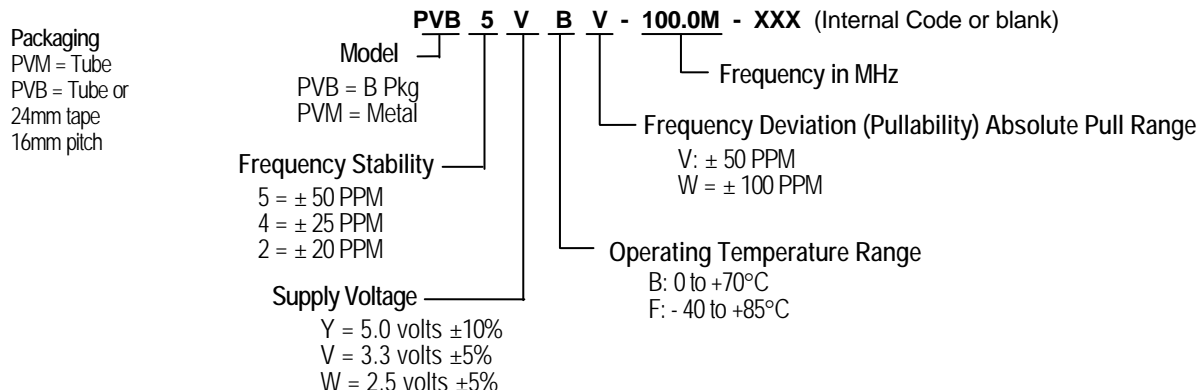
| | |
|------------------------------|--|
| Overall Frequency Stability | ± 50 PPM, ± 25 PPM, ± 20 PPM over Operating Temperature Range |
| Operating Temperature Range | 0 to +70°C is standard, but can be extended to - 40 to +85°C |
| Storage Temperature Range | - 55 to +125°C |
| Supply Voltage (Vcc) | 3.3 volts ± 5% standard, but 5.0 volts or 2.5 volts also available. See Test Circuit 5. |
| Supply Current (Icc) | < 250 MHz = 90 mA maximum, 250 MHz and above = 100 mA maximum |
| Output High Level | 2.275 V minimum referenced to Ground, Vcc = 3.300V, 0.975 V minimum referenced to termination voltage, - 1.025 V minimum referenced to Vcc |
| Output Low Level | 1.680 V maximum referenced to Ground, Vcc = 3.300V, 0.380 V maximum referenced to termination voltage, - 1.620 V maximum referenced to Vcc |
| Output Symmetry | 45/55% referenced to 50% of amplitude |
| Output Rise & Fall (Tr & Tf) | 1.0 nS maximum when Vth is 10% and 90% of waveform |
| Jitter | 6 pS RMS maximum measured from 12 kHz to 20 MHz from output frequency |
| E/D Internal Pullup | 50 kohm minimum to Vcc |
| V disable | 0.3 Vcc maximum referenced to Ground |
| V enable | 0.7 Vcc minimum referenced to Ground |
| Linearity | ± 10% typical |
| Slope | Positive and monotonic |
| Control Voltage Range (CVR) | For 5.0 Vcc, CVR = 0.5 to 4.5 V, For 3.3 Vcc, CVR = 0.0 to 3.3 V, For 2.5 Vcc, CVR = 0.0 to 2.5 V |
| Pullability | Pull range is defined as absolute pull range. This is the pull range about the specified oscillator frequency, independent of supply, temperature range and load. Typical values are ± 25, ± 50 and ± 100 PPM. |

PVB Output Enable/Disable (E/D)

| | |
|---------------------|---|
| Output Enable Time | 100 nS maximum |
| Output Disable Time | 100 nS maximum |
| When Disabled | Q Output = Logic Low, QN Output = Logic High. Both Outputs are active |

Part Numbering Guide

Portions of the part number that appear after the frequency may not be marked on part (C of C provided)



Mar 2004

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



Pletronics, Inc.

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

Manufacturer of High Quality Frequency Control Products

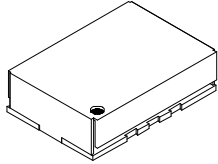
PVB, PVM PECL VCXO Series

Mechanical: inches (mm)

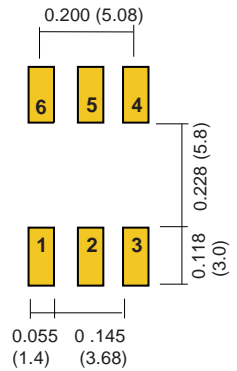
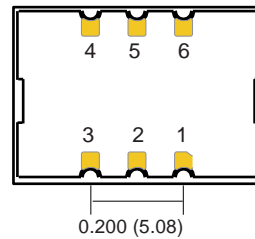
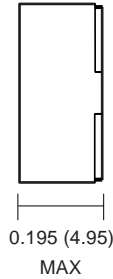
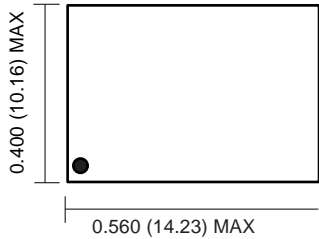
not to scale

Solder Pads

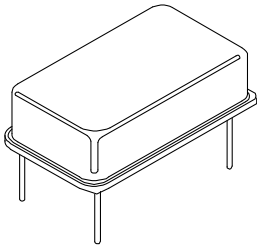
Due to part size and factory abilities, part marking may vary from lot to lot and may contain our part number or an internal code.



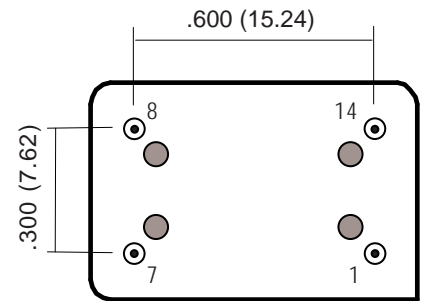
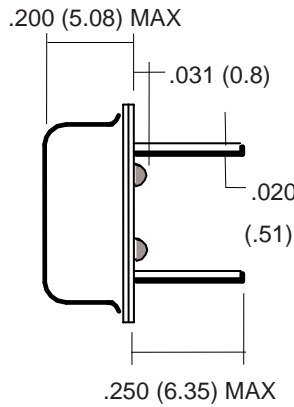
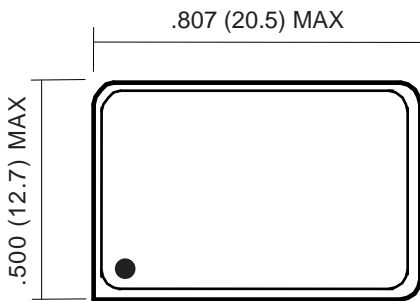
PVB Series



| PIN | SIGNAL |
|-----|--------|
| 1 | Vcon |
| 2 | E/D |
| 3 | GND |
| 4 | Q OUT |
| 5 | QN OUT |
| 6 | Vcc |



PVM Series



| PIN | SIGNAL |
|-----|--------|
| 1 | Vcon |
| 7 | GND |
| 8 | OUT |
| 14 | Vcc |

See page 6 for Layout Guidelines

Mar 2004