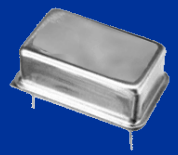




# B1144B OSCILLATOR SERIES

## TIGHT STABILITY HCMOS/TTL OUTPUT



Features:

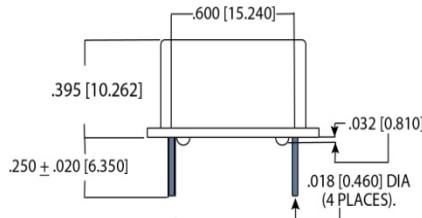
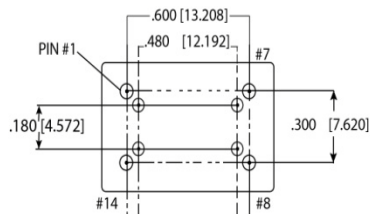
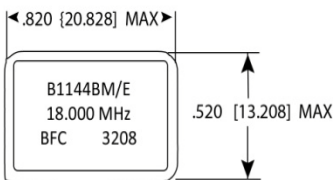
- Local Reference Clock
- 1.75 to 35.0 MHz Frequency Range
- ± 20ppm Stability
- + 5V dc Input
- Enable / Disable Option Available
- Telecommunications, Modems, and Other Applications.
- Extended Temperature Version Available
- TTL/CMOS Compatible Output

**ELECTRICAL SPECIFICATIONS**

Model	B1144BM/E	B1144BH/E	B1144BT/E	B1144BX/E
Frequency Range (MHz)	1.75 TO 35.0			
Frequency Stability (ppm)	Inclusive of Shock, Vibration, Calibration, Temperature, Voltage, Load, Aging			
	± 20ppm	± 16ppm	± 14ppm	± 20ppm
Temperature Range (°C)	Operating	-40° to +85°C		-30° to +70°C
	Storage	-55°C to +125°C		
Input Voltage (V)	5Vdc ±5%			
Input Current	<50mA@25°C; <60mA over temperature range			
Voltage Stability	< ±3ppm			
Current Output Shorted (1 sec. max.)	-30mA min., -140mA max.			
Output Symmetry (% @ CMOS/TTL Levels)	45/55 @, 12 MHz; 40/60 @ 13-35 MHz			
T <sub>R</sub> and T <sub>F</sub> (ns)	4 @ TTL: 0.5V to 2.5V dc 5 @ CMOS: 20% to 80% Vcc			
"0" Level (V <sub>OL</sub> )	+0.5V max. @I <sub>OL</sub> = 16mA			
"1" Level (V <sub>OH</sub> )	2.5V min. @I <sub>OH</sub> = -24 mA			
High or Low Level Output Current (mA)	±20 Absolute max. value			
Output Voltage	-0.5V to Vcc +0.5V			
Start Up Time (ms)	<10 ms max.			
Output Load	10 TTL Gates; CMOS compatible			
Load Stability	< ±2ppm typical; C <sub>L</sub> = 15 pF			
Enable/Disable	Pd <sub>LH</sub> 1 μsec. max.; Pd <sub>HL</sub> 1 usec max.			

**ELECTRICAL SPECIFICATIONS**

MODEL CHARACTERISTICS	B114BM/E	B1144BH/E	B1144BT/E	B1144BX/E
Calibration	±5 ppm	±4 ppm	±4 ppm	±15 ppm
vs. Temperature	±11 ppm 0°C TO +70°C	±8 ppm 0°C to +60°C	±6 ppm 0°C to +60°C	-30°C to +70°C (incl. cal. & temp.)
vs. Voltage	±0.5 ppm	±0.5 ppm	±0.5 ppm	±0.5 ppm
Vs. Load	±0.5 ppm	±0.5 ppm	±0.5 ppm	±0.5 ppm
Vs. Shock	±0.5 ppm	±0.5 ppm	±0.5 ppm	±0.5 ppm
Vs. Vibration	±0.5 ppm	±0.5 ppm	±0.5 ppm	±0.5 ppm
1 Year Aging	±2.0 ppm	±2.0 ppm	±2.0 ppm	±3.0 ppm
Total Stability	±20ppm	±16ppm	±14ppm	±20ppm



PIN	Function
1	NC
7	Gnd
8	Output
14	+Vcc