

Heavy Load CMOS Oscillators

Series **CH11**

Cardinal's heavy load 50 pF HCMOS oscillators have a frequency range up to 100.00 MHz for products requiring faster speeds. The oscillators are available with tristate for testing with automatic test equipment. Low voltage, 3.3V, is also available.

Specifications:

Frequency Range: 1.843200 ~ 100.000000 MHz

Frequency Stability: ± 100 ppm *Standard*
 ± 50 ppm
 ± 25 ppm
 ± 10 ppm

Operating Temperature: $-10^{\circ}\text{C} \sim +70^{\circ}\text{C}$ *Standard*
 $-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$

Storage Temperature: $-55^{\circ}\text{C} \sim +125^{\circ}\text{C}$

Input Voltage: $+5.0 \pm 0.5$ V

Input Current: 1.8432 ~ 25.000000 25 mA Max
 25.000+ ~ 50.000000 45 mA Max
 50.000+ ~ 70.000000 70 mA Max
 70.000+ ~ 100.000000 80 mA Max

Output Voltage: Output '0' Level 0.5 V Max
 Output '1' Level 4.5 V Min

Symmetry: 40/60 % @ $1/2 V_{DD}$ *Standard*
 45/55 % @ $1/2 V_{DD}$

Rise/Fall Time: 7 ns Max

Start-Up Time: 10 ms Max

Output Load: 10 TTL, 50 pF CMOS

Optional Features: Tri-State Output Pin 1
 Gull Wing Leads

Note: For package dimensions see page 16. All options available.

Pin Configurations

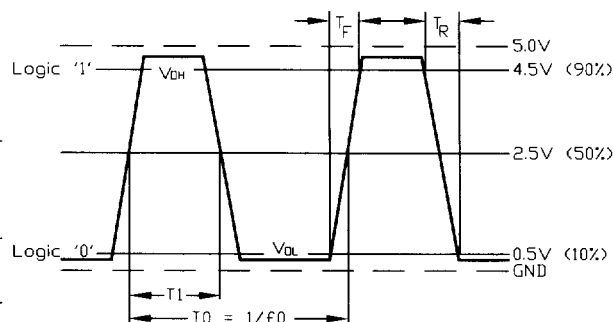
Dual-In-Line 14 Pin

1	NC or E/D
7	GND
8	Output
14	Voltage

Dual-In-Line 8 Pin

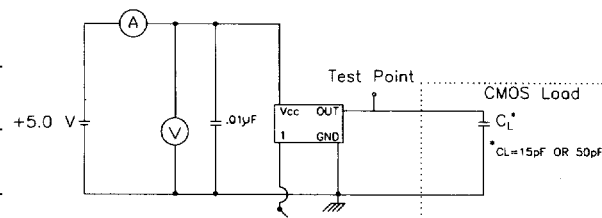
1	NC or E/D
4	GND
5	Output
8	Voltage

OUTPUT WAVE FORM



$$\text{SYMMETRY} = \left(\frac{T_1}{T_0} \right) \times 100\%$$

TEST CIRCUIT



* Includes stray and probe capacitance (15pF TYP)