

# TTL CLOCK OSCILLATOR F1100H

The F1100H Clock Oscillator is TTL compatible. It has been designed for low current consumption and fast rise time. Its standard 45/55% symmetry allows it to directly drive microprocessors that previously used a divide-by-2 stage in applications up to 50MHz. The package is all metal with pin 7 as case ground which provides shielding to help minimize EMI radiation.



Discontinued

## FEATURES

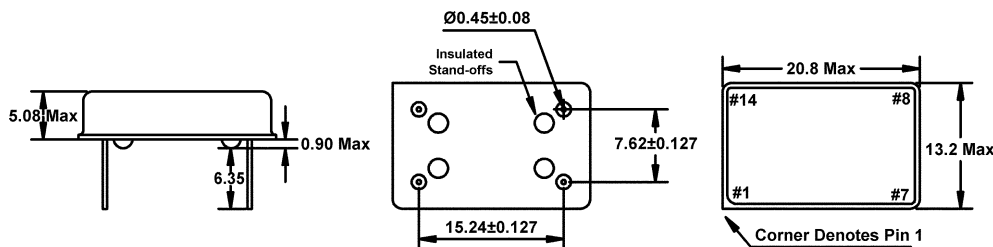
- 45/55% Symmetry up to 50MHz
- Fast Rise/Fall Times
- -40°C to 85°C Option
- Low Current Consumption

| MODE NUMBER SELECTION      | Model Number |
|----------------------------|--------------|
| ±100PPM (STD -10°C ~ 70°C) | F1100H       |
| ±100PPM (-40°C ~ 85°C)     | F1100HR      |
| ±50PPM                     | F1145H       |
| ±25PPM                     | F1144H       |

## ELECTRICAL CHARACTERISTICS (VDD=5.0V, RL=noted below, CL=15pF)

| PARAMETERS           | FREQUENCY RANGE  | CONDITIONS      | MIN   | MAX    | UNITS |
|----------------------|------------------|-----------------|-------|--------|-------|
| Frequency Range (Fo) |                  |                 | 0.500 | 80.000 | MHz   |
| Frequency Stability  | 0.500 ~ 80.000   | All Conditions* | -100  | +100   | PPM   |
| Temperature Range    | 0.500 ~ 80.000   |                 |       |        |       |
| Operating (TOPR)     |                  |                 | -10   | +70    | °C    |
| Optional             |                  |                 | -40   | +85    |       |
| Storage (TSTG)       |                  |                 | -55   | +125   |       |
| Supply Voltage (VDD) | 0.500 ~ 80.000   |                 | +4.5  | +5.5   | V     |
| Input Current (IDD)  | 0.500 ~ 25.000   |                 |       | 13     | mA    |
|                      | 25.000+ ~ 50.000 |                 |       | 18     |       |
|                      | 50.000+ ~ 80.000 |                 |       | 25     |       |
| Output Symmetry      | 0.500 ~ 50.000   | 1.4V Level      | 45    | 55     | %     |
|                      | 50.000+ ~ 80.000 |                 | 40    | 60     |       |
| Rise Time (TR)       | 0.500 ~ 4.000    | 0.4V to 2.4V    |       | 5      | nS    |
|                      | 4.000+ ~ 25.000  | 0.4V to 2.4V    |       | 8      |       |
|                      | 25.000+ ~ 80.000 | 0.5V to 2.4V    |       | 5      |       |
| Fall Time (TF)       | 0.500 ~ 25.000   | 2.4V to 0.4V    |       | 5      |       |
|                      | 25.000+ ~ 80.000 | 2.4V to 0.5V    |       | 5      |       |
| Output Voltage (VOL) | 0.500 ~ 25.000   | IOL = 16 mA     |       | 0.4    | V     |
|                      | 25.000+ ~ 80.000 | IOL = 4 mA      |       | 0.5    |       |
| (VOH)                | 0.500 ~ 25.000   | IOH = -0.4 mA   | 2.4   |        |       |
|                      | 25.000+ ~ 80.000 | IOH = -0.2 mA   | 2.4   |        |       |
| Output Current (IOL) | 0.500 ~ 25.000   | VOL = 0.4 V     |       | 16     | mA    |
|                      | 25.000+ ~ 80.000 | VOL = 0.5 V     |       | 4      |       |
| (IOH)                | 0.500 ~ 4.000    | VOH = 2.4V      |       | -0.4   |       |
|                      | 4.000+ ~ 25.000  |                 |       | -0.2   |       |
|                      | 25.000+ ~ 80.000 |                 |       | -0.2   |       |
| Output Load          | 0.500 ~ 25.000   | RL = 400Ω       |       | 10     | TTL   |
|                      | 25.000+ ~ 80.000 | RL = 2kΩ        |       | 10     | LSTTL |
| Start-up Time (TS)   | 0.500 ~ 25.000   |                 |       | 5      | mS    |
|                      | 25.000+ ~ 80.000 |                 |       | 10     |       |

\*Inclusive of 25°C tolerance, operating temperature range, input voltage change, load change, aging, shock, and vibration. See page 44 for mechanical specifications, test circuits, and output waveform. All specifications subject to change without notice. Rev. 03/02/00



All dimensions are in millimeters.