

# 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.

## FEATURES

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

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

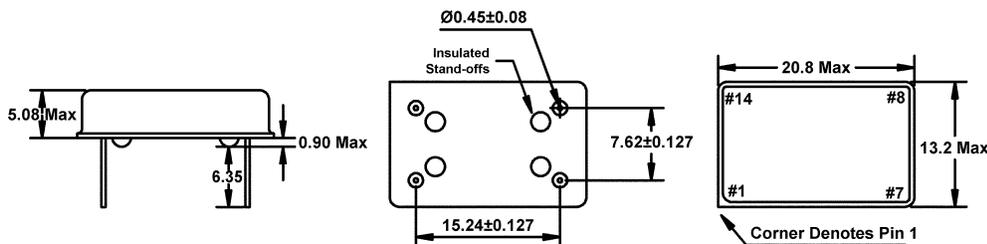


OSCILLATORS

## • 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.