

TTL TRI-STATE HIGH FREQUENCY CLOCK OSCILLATOR F1100HT

The F1100HT Clock Oscillator is designed to drive high frequency TTL applications (up to 10 TTL gates). This part has a tri-state enable/disable function on pin 1 to facilitate testing with automatic test equipment (ATE).

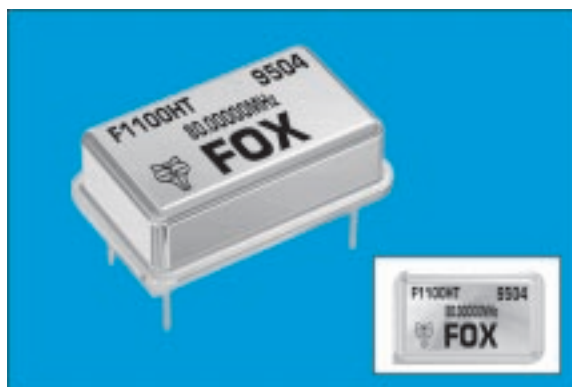
FEATURES

- High Frequency TTL
- Fast Rise/Fall Times
- 45/55 Symmetry (1.544 ~ 80 MHz)
- Tri-state Enable/Disable

• PART NUMBER SELECTION

Frequency Stability	Part Number
±100PPM	F1100HT
±50PPM (to 90 MHz)	F1145HT
±25PPM (to 50 MHz)	F1144HT

Note: -40°C ~ +85°C "R" version available
(ex: F1100HTR) to 90 MHz



Actual Size

• ELECTRICAL CHARACTERISTICS (Ta = 25°C, VDD = 5.0V, RL = 400Ω)

PARAMETERS	FREQUENCY RANGE	CONDITIONS	MIN	MAX	UNITS
Frequency Range (Fo)	1.544 ~ 110.000	All Conditions*	1.544	110.000	MHz
Frequency Stability	1.544 ~ 110.000		-100	+100	PPM
Temperature	1.544 ~ 110.000				
Operating (TOPR)			-10	+70	°C
Storage (TSTG)			-55	+125	
Supply Voltage (VDD)	1.544 ~ 110.000		+4.5	+5.5	V
Input Current (IDD)	1.544 ~ 25.000			16	mA
	25.000+ ~ 50.000			30	
	50.000+ ~ 80.000			60	
	80.000+ ~ 110.000			75	
Output Symmetry	1.544 ~ 80.000	1.4V Level	45	55	%
	80.000+ ~ 110.000		40	60	
Rise Time (TR)	1.544 ~ 110.000	0.4V to 2.4V		5	nS
Fall Time (TF)	1.544 ~ 110.000	2.4V to 0.4V		5	
Output Voltage (VOL)	1.544 ~ 110.000	IOL = 16 mA		0.4	V
		IOH = -4 mA	2.4		
Output Current (IOL)	1.544 ~ 110.000	VOL = 0.4 V		16	mA
		VOH = 2.4 V		-4	
Output Load	1.544 ~ 110.000	RL = 400Ω		10	TTL
Start-up Time (Ts)	1.544 ~ 110.000			10	mS

* Inclusive of 25°C tolerance, operating temperature range, input voltage change, load change, aging, shock, and vibration.

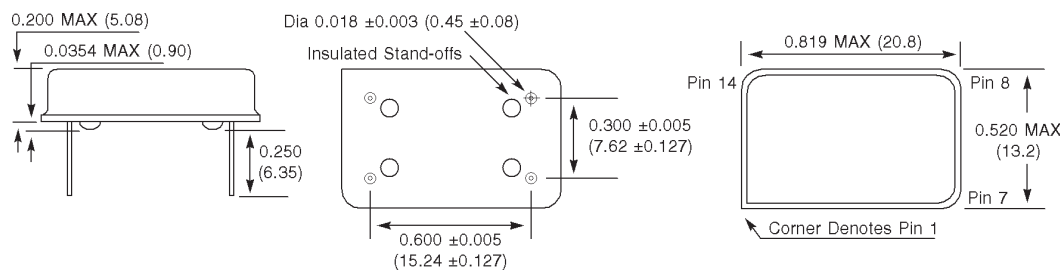
***An internal pullup resistor from pin 1 to pin 14 allows active output if pin 1 is left open.

See page 35 for mechanical specifications, test circuits, and output waveform.

All specifications subject to change without notice. Rev. 6/16/98

• ENABLE / DISABLE FUNCTION**

INH (Pin 1)	OUTPUT (Pin 8)
OPEN ***	ACTIVE
'1' Level VIH ≥ 2.2 V	ACTIVE
'0' Level VIL ≤ 0.8 V	High Z



Pin Connections
 #1 E/D ** #8 Output
 #7 GND (Case) #14 +5Vdc

Inch dimensions shall govern.
 All dimensions are in inches & parenthetically in millimeters.