

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).

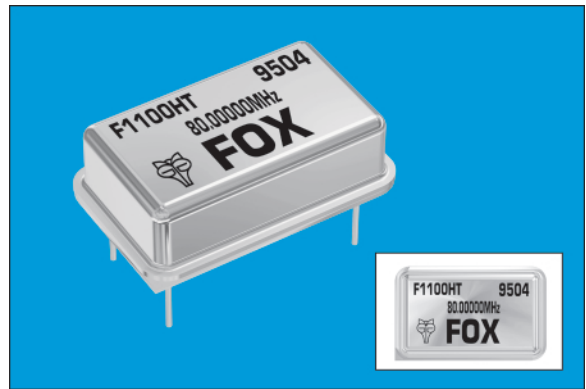
FEATURES

- 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 (V_{DD} = 5.0V, R_L = 400Ω)

PARAMETERS	FREQUENCY RANGE	CONDITIONS	MIN	MAX	UNITS
Frequency Range (F _o)			1.544	110.000	MHz
Frequency Stability	1.544 ~ 110.000	All Conditions*	-100	+100	PPM
Temperature	1.544 ~ 110.000				
Operating (TOPR)			-10	+70	°C
Storage (TSTG)			-55	+125	
Supply Voltage (V _{DD})	1.544 ~ 110.000		+4.5	+5.5	V
Input Current (I _{DD})	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 (T _R)	1.544 ~ 110.000	0.4V to 2.4V		5	nS
Fall Time (T _F)		2.4V to 0.4V		5	
Output Voltage (V _{OL})	1.544 ~ 110.000	I _{OL} = 16 mA		0.4	V
(V _{OH})		I _{OH} = -4 mA	2.4		
Output Current (I _{OL})	1.544 ~ 110.000	V _{OL} = 0.4 V		16	mA
(I _{OH})		V _{OH} = 2.4 V		-4	
Output Load	1.544 ~ 110.000	R _L = 400Ω		10	TTL
Start-up Time (T _s)	1.544 ~ 110.000			10	mS

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

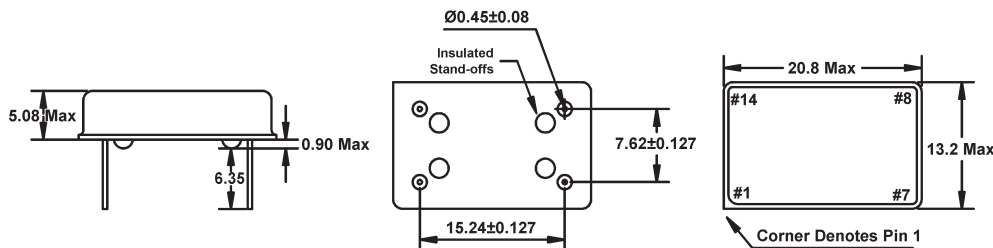
***An internal pullup resistor from pin 1 to pin 14 allows active output if pin 1 is left open.

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 V _{IH} ≥ 2.2 V	ACTIVE
'0' Level V _{IL} ≤ 0.8 V	High Z



Pin Connections

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

All dimensions are in millimeters.