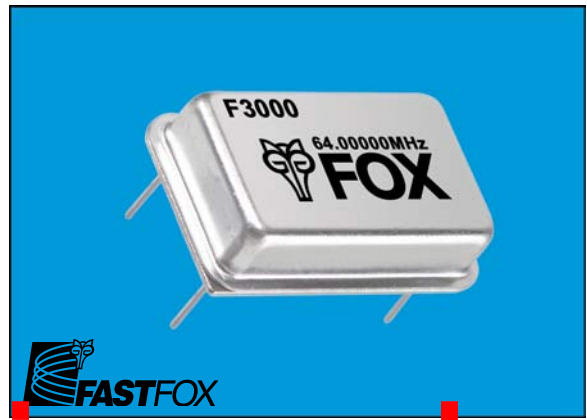


# HCMOS/TTL HEAVY LOAD OSCILLATOR F3000

The F3000 Clock Oscillator is capable of driving heavy HCMOS loads. This oscillator has a tri-state enable/disable function on pin 1 to facilitate testing with ATE. The package is all metal with pin 7 as case ground which provides shielding to help minimize EMI radiation.



## FEATURES

- 50pF HCMOS Load to 80 MHz
- 10TTL Fanout
- Tri-State Enable/Disable

• MODEL NUMBER SELECTION	
Frequency Stability	Model Number
±100PPM	F3000
±50PPM (up to 90MHz)	F3005
±25PPM (up to 50MHz)	F3006

Note: -40°C ~ +85°C "R" version available (ex: F3000R) to 90 MHz

# Discontinued

• ELECTRICAL CHARACTERISTICS (V <sub>DD</sub> = 5.0V, C <sub>L</sub> = 50pF)					
PARAMETERS	FREQUENCY RANGE	CONDITIONS	MIN	MAX	UNITS
Frequency Range (Fo)			1.544	120.000	MHz
Frequency Stability	1.544 ~ 100.000 100.000+ ~ 120.000	All Conditions*	-100 -200	+100 +200	PPM
Temperature Range	1.544 ~ 120.000				
Operating (TOPR)			-10	+70	°C
Storage (TSTG)			-55	+125	
Supply Voltage (VDD)	1.544 ~ 120.000		+4.5	+5.5	V
Input Current (IDD)	1.544 ~ 25.000 25.000+ ~ 50.000 50.000+ ~ 80.000 80.000+ ~ 120.000			25 40 77 82	mA
Output Symmetry	1.544 ~ 80.000 80.000+ ~ 120.000	2.5V	45 40	55 60	%
Rise Time (TR)	1.544 ~ 120.000	0.5V ~ 4.5V		5	nS
Fall Time (TF)	1.544 ~ 120.000	4.5V ~ 0.5V		5	
Output Voltage (VOL) (VOH)	1.544 ~ 120.000	IOL = 16 mA IOH = -16 mA	4.5	0.5	V
Output Current (IOL) (IOH)	1.544 ~ 120.000	VOL = 0.5 V VOH = 4.5 V		16 - 16	mA
Output Load	1.544 ~ 120.000 1.544 ~ 80.000 80.000+ ~ 100.000 100.000+ ~ 120.000	TTL HCMOS HCMOS HCMOS		10 50 30 15	TTL pF pF pF
Start-up Time (Ts)	1.544 ~ 120.000			10	mS

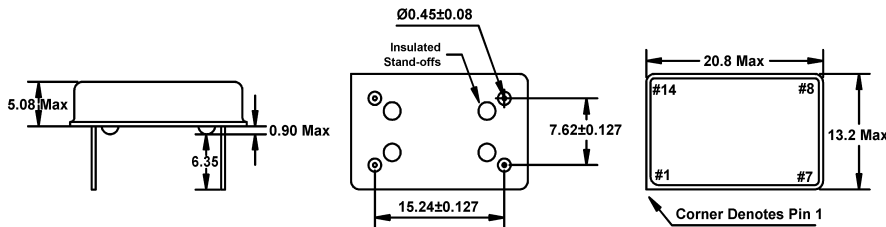
\* Inclusive of 25°C tolerance, operating temperature range, input voltage change, load change, aging, shock, and vibration.

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

See page 44 for mechanical specifications, test circuits, and output waveform.

All specifications subject to change without notice. Rev. 03/02/00

• 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



All dimensions are in millimeters.