

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 _{DD} = 5.0V, C _L = 50pF)					
PARAMETERS	FREQUENCY RANGE	CONDITIONS	MIN	MAX	UNITS
Frequency Range (Fo)			1.544	120.000	MHz
Frequency Stability	1.544 ~ 100.000	All Conditions*	-100	+100	PPM
	100.000+ ~ 120.000		-200	+200	
Temperature Range	1.544 ~ 120.000		-10	+70	°C
			-55	+125	
Supply Voltage (V _{DD})	1.544 ~ 120.000		+4.5	+5.5	V
Input Current (I _{DD})	1.544 ~ 25.000			25	mA
	25.000+ ~ 50.000			40	
	50.000+ ~ 80.000			77	
	80.000+ ~ 120.000			82	
Output Symmetry	1.544 ~ 80.000	2.5V	45	55	%
	80.000+ ~ 120.000		40	60	
Rise Time (T _r)	1.544 ~ 120.000	0.5V ~ 4.5V		5	nS
Fall Time (T _f)	1.544 ~ 120.000	4.5V ~ 0.5V		5	nS
Output Voltage (V _{OL})	1.544 ~ 120.000	I _{OL} = 16 mA		0.5	V
		I _{OH} = -16 mA	4.5		
Output Current (I _{OL})	1.544 ~ 120.000	V _{OL} = 0.5 V		16	mA
		V _{OH} = 4.5 V		-16	
Output Load	1.544 ~ 120.000	TTL		10	TTL
	1.544 ~ 80.000	HCMOS		50	
	80.000+ ~ 100.000	HCMOS		30	
	100.000+ ~ 120.000	HCMOS		15	
Start-up Time (T _s)	1.544 ~ 120.000			10	mS

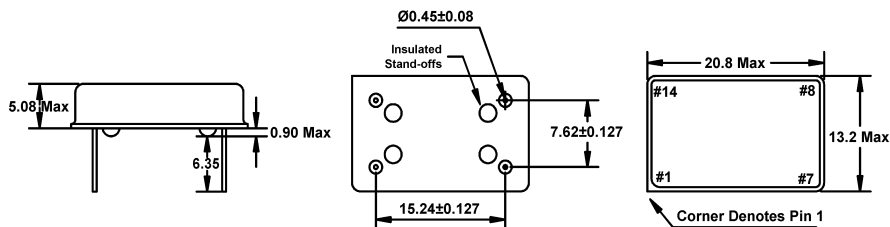
* Inclusive of 25°C tolerance, operating temperature range, input voltage change, load change, aging, shock, and vibration.

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



All dimensions are in millimeters.