

# HALF SIZE HCMOS/TTL HEAVY LOAD OSCILLATOR F3020

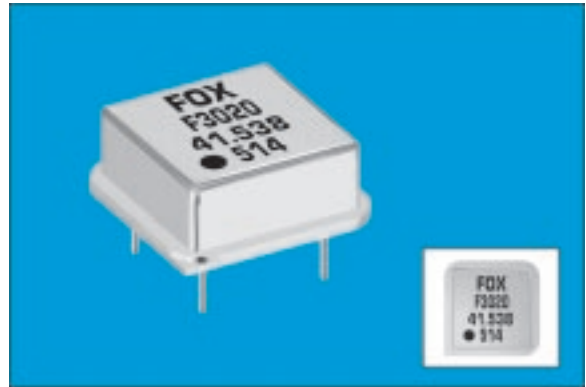
The F3020 Clock Oscillator is our half size design capable of driving heavy HCMOS loads. This oscillator has a tri-state enable/disable on pin 1 to facilitate testing with ATE. The package is all metal with pin 4 as case ground which provides shielding to help minimize EMI radiation.

## FEATURES

- 8 Pin Dip
- 50pF HCMOS Load to 80 MHz
- 10TTL Fanout
- Tri-state Enable/Disable
- Drives 80486 & 68030
- -40°C to +85°C Available

### • PART NUMBER SELECTION

Frequency Stability	Part Number
±100PPM	F3020
±50PPM (up to 90MHz)	F3025
±25PPM (up to 50MHz)	F3026



Actual Size



### • ELECTRICAL CHARACTERISTICS (Ta = 25°C, VDD = 5.0V, CL = 50pF)

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

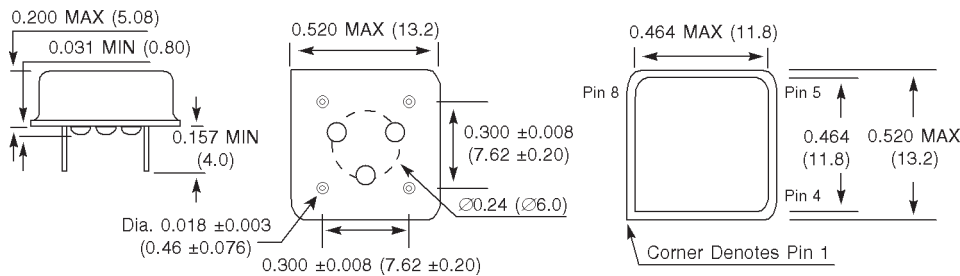
\* Inclusive of 25°C tolerance, operating temperature range, input voltage change, load change, aging, shock, and vibration.

\*\*An internal pullup resistor from pin 1 to pin 8 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. 5/20/98

### • ENABLE / DISABLE FUNCTION\*\*

INH (Pin 1)	OUTPUT (Pin 5)
OPEN ***	ACTIVE
'1' Level VIH ≥ 2.2 V	ACTIVE
'0' Level VIL ≤ 0.8 V	High Z



**Pin Connections**  
#1 E/D\*\* #5 Output  
#4 GND (Case) #8 +5VDC

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