

# HCMOS TRI-STATE ENABLE/DISABLE OSCILLATOR F5C-2E

The F5C-2E Clock Oscillator employs a tri-state function for control of the output. Applying a logic '1' to pin 1 enables the oscillator output and a logic '0' to pin 1 disables the output to a high impedance state called High Z state. This allows for testing by automated test equipment by having the part appear as removed from the circuit. The package is all metal with pin 7 as case ground which provides shielding to help minimize EMI radiation.

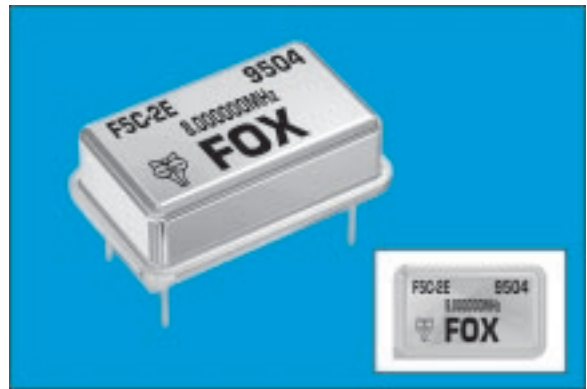
## FEATURES

- 50pF HCMOS Load
- 10TTL Fanout
- Low Cost
- Tri-state Enable/Disable
- 14 Pin Dip

### • PART NUMBER SELECTION

Frequency Stability	Part Number
±100PPM	F5C-2E
±50PPM	F6C-2E
±25PPM	F7C-2E

Note: -40°C ~ 85°C "R" version available (ex: F5C-2ER)



Actual Size



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

PARAMETERS	FREQUENCY RANGE	CONDITIONS	MIN	MAX	UNITS
Frequency Range (Fo)	1.000 ~ 70.000		1.000	70.000	MHz
Frequency Stability	1.000 ~ 70.000	All Conditions *	-100	+100	PPM
Temperature Range	1.000 ~ 70.000				
Operating (TOPR)			0	+70	°C
Storage (TSTG)			-55	+125	
Supply Voltage (VDD)	1.000 ~ 70.000		+4.5	+5.5	V
Input Current (IDD)	1.000 ~ 40.000			40	mA
	40.000+ ~ 70.000			60	
Output Symmetry	1.000 ~ 50.000	2.5V	45	55	%
	50.000+ ~ 70.000		40	60	
Rise Time (TR)	1.000 ~ 70.000	0.5V ~ 4.5V		10	nS
Fall Time (TF)	1.000 ~ 70.000	4.5V ~ 0.5V		10	
Output Voltage (VOL)	1.000 ~ 70.000	IOL = 16 mA		0.5	V
(VOH)		IOH = -16 mA	4.5		
Output Current (IOL)	1.000 ~ 70.000	VOL = 0.5 V		16	mA
(IOH)		VOH = 4.5 V		-16	
Output Load	1.000 ~ 70.000	TTL		10	TTL
		HCMOS		50	pF
Start-up Time (Ts)	1.000 ~ 70.000			10	mS
Output Enable/Disable Time	1.000 ~ 70.000			100	nS

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

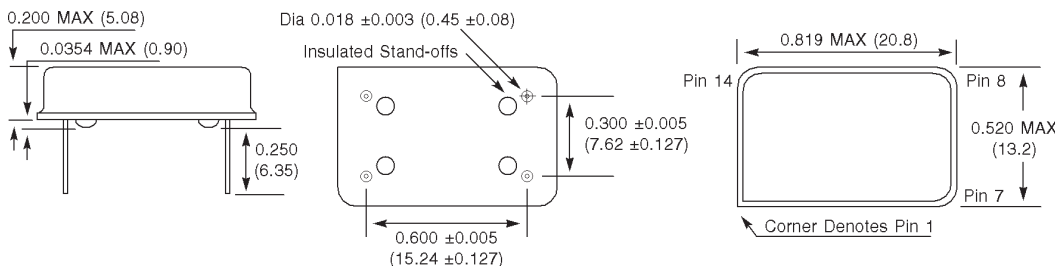
\*\*\*An internal pullup resistor from pin 1 to pin 14 allows active output if pin 1 is left open.

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

All specifications subject to change without notice. Rev.5/29/98

### • 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.