

HCMOS TRI-STATE ENABLE/DISABLE OSCILLATOR

F5C-2E

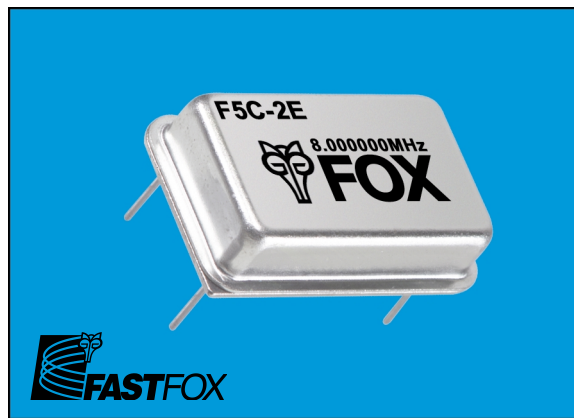
The F5C-2E Clock Oscillator employs a tri-state function for control of the output. Applying a logic '1' to pin 1 enables the oscillator output and a logic '0' to pin 1 disables the output to a high impedance state called High Z state. This allows for testing by automated test equipment by having the 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

• MODEL NUMBER SELECTION	
Frequency Stability	Model Number
±100PPM	F5C-2E
±50PPM	F6C-2E
±25PPM	F7C-2E

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



OSCILLATORS

• ELECTRICAL CHARACTERISTICS (V _{DD} = 5.0V, C _L = 50pF)					
PARAMETERS	FREQUENCY RANGE	CONDITIONS	MIN	MAX	UNITS
Frequency Range (F _o)	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 (T _{OPR})			0	+70	°C
Storage (T _{STG})			-55	+125	
Supply Voltage (V _{DD})	1.000 ~ 70.000		+4.5	+5.5	V
Input Current (I _{DD})	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 (T _R)	1.000 ~ 70.000	0.5V ~ 4.5V		10	nS
Fall Time (T _F)	1.000 ~ 70.000	4.5V ~ 0.5V		10	
Output Voltage (V _{OL})	1.000 ~ 70.000	I _{OL} = 16 mA		0.5	V
(V _{OH})		I _{OH} = -16 mA	4.5		
Output Current (I _{OL})	1.000 ~ 70.000	V _{OL} = 0.5 V		16	mA
(I _{OH})		V _{OH} = 4.5 V		-16	
Output Load	1.000 ~ 70.000	TTL		10	TTL
		HCMOS		50	pF
Start-up Time (T _s)	1.000 ~ 70.000			10	mS
Output Enable/Disable Time	1.000 ~ 70.000			100	nS

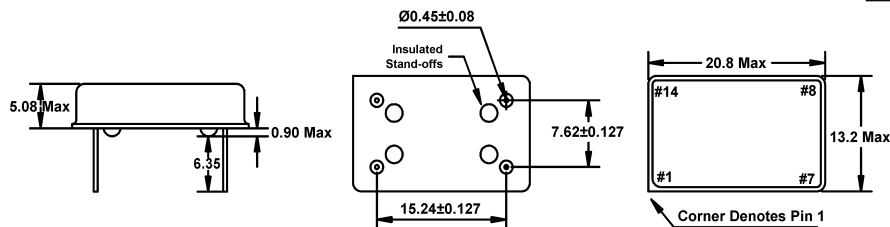
* Inclusive of 25°C tolerance, operating temperature range, input voltage change, load change, aging, shock, and vibration.

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

See page 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.