

HCMOS TRI-STATE ENABLE/DISABLE OSCILLATOR F5C-2

The F5C-2 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

- 15pF HCMOS Load
- 10 TTL Fanout
- 45/55 Symmetry to 80MHz
- Tri-state Enable/Disable
- Fast Rise/Fall Times
- -40°C to +85°C Available

• PART NUMBER SELECTION

Frequency Stability	Part Number
±100PPM	F5C-2
±50PPM (up to 90 MHz)	F6C-2
±25PPM (up to 50 MHz)	F7C-2



Actual Size



• ELECTRICAL CHARACTERISTICS (Ta = 25°C, VDD = 5.0V, CL = 15pF)

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 25.000+ ~ 50.000 50.000+ ~ 80.000 80.000+ ~ 100.000			20 35 59 69	mA
Output Symmetry	1.544 ~ 80.000 80.000+ ~ 100.000	2.5V	45 40	55 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) (VOH)	1.544 ~ 100.000	IOL = 16 mA IOH = -16 mA	4.5	0.5	V
Output Current (IOL) (IOH)	1.544 ~ 100.000	VOL = 0.5 V VOH = 4.5 V		16 -16	mA
Output Load	1.544 ~ 100.000	TTL HCMOS		10 15	TTL pF
Start-up Time (Ts)	1.544 ~ 100.000			10	mS
Output Enable/Disable Time	1.544 ~ 100.000			100	nS

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

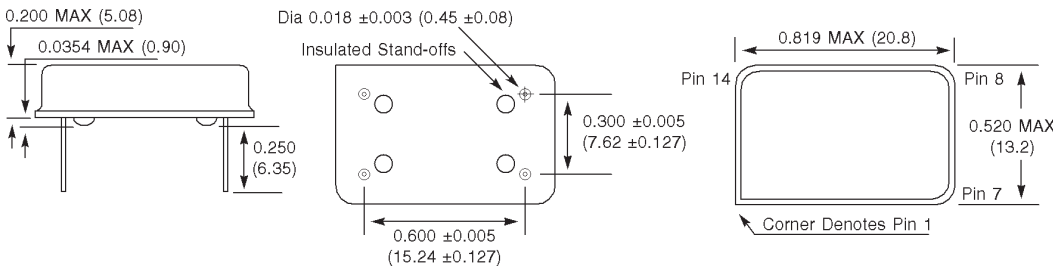
*** An internal pullup resistor from pin 1 to pin 14 allows active output if pin 1 is left open.

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

All specifications subject to change without notice. Rev. 5/20/98

• 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.