

## 3.3V TRI-STATE ENABLE/DISABLE OSCILLATORS

# F5C-2E3 / H5C-2E3

### FEATURES

- 3.3V Operation
- HCMOS Output
- Tri-State Enable/Disable
- 14-Pin DIP / 8-Pin DIP



• MODEL NUMBER SELECTION			
Model Number	Frequency Stability <sup>1</sup>	Operating Temperature (°C)	Frequency Range (MHz)
F5C-2E3 / H5C-2E3	±100PPM	0 ~ +70	1.000 ~ 160.000
F5C-2E3R / H5C-2E3R	±100PPM	-40 ~ +85	1.000 ~ 160.000
F6C-2E3 / H6C-2E3	±50PPM	0 ~ +70	1.000 ~ 160.000
F6C-2E3R / H6C-2E3R	±50PPM	-40 ~ +85	1.000 ~ 160.000
F7C-2E3 / H7C-E3	±25PPM	0 ~ +70	1.000 ~ 160.000
F7C-2E3R / H7C-2E3R	±25PPM	-40 ~ +85	1.000 ~ 160.000
F8C-2E3 / H8C-2E3	±20PPM	0 ~ +70	1.000 ~ 160.000

• ELECTRICAL CHARACTERISTICS	
PARAMETERS	MAX (unless otherwise noted)
Frequency Range (Fo)	1.000 ~ 160.000 MHz
Storage Temperature Range (TSTG)	-55°C ~ +125°C
Supply Voltage (VDD)	3.3V ± 10%
Input Current (IDD)	
1.000 ~ 40.000 MHz	20mA
40.000+ ~ 160.000 MHz	40mA
Output Symmetry (50% VDD)	40% ~ 60%
Rise Time (10% ~ 90% VDD) (TR)	10 nS
Fall Time (90% ~ 10% VDD) (TF)	10 nS
Output Voltage (VOL)	10% VDD
(VOH)	90% VDD Min
Output Current (IOL)	8mA Min
(IOH)	-8mA Min
Output Load (HCMOS)	15pF
Start-up Time (Ts)	10mS
Output Enable/Disable Time <sup>2</sup>	100nS

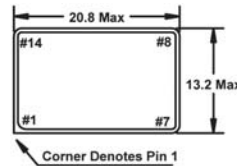
<sup>1</sup> Inclusive of 25°C tolerance, operating temperature range, input voltage change, load change, aging, shock, and vibration.

<sup>2</sup> An internal pullup resistor from pin 1 to VDD allows active output if pin 1 is left open.

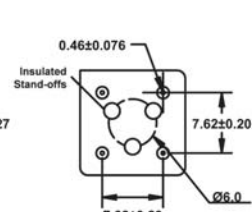
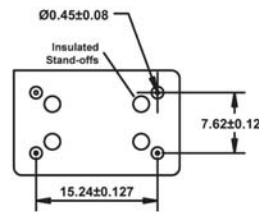
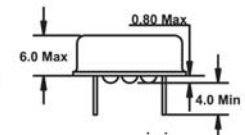
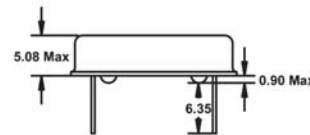
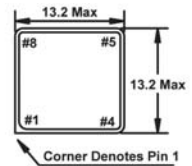
See page 30 for mechanical specifications, test circuits, and output waveform.

All specifications subject to change without notice. Rev. 11/25/03

F5C-2E3



H5C-2E3



**Pin Connections**  
#1 E/D #8 Output  
#7 GND (Case) #14 Vdd

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

All dimensions are in millimeters.

• ENABLE / DISABLE FUNCTION	
INH (Pin 1)	OUTPUT (Pin 8 or Pin 5)
OPEN <sup>2</sup>	ACTIVE
'1' Level VIH ≥ 2.2 V	ACTIVE
'0' Level VIL ≤ 0.8 V	High Z