



HCMOS 2.5x2mm 3.3V Oscillator

Model: F230 SERIES RoHS Compliant / Pb Free Rev. 5/20/2008



FEATURES

- 3.3V Operation
- Standby Function
- Tape and Reel (3,000 pcs. STD)

• PART NUMBER SELECTION [Learn More](#) - Internet Required

Part Number	Model Number	Frequency Stability ¹	Operating Temperature (°C)	Frequency Range (MHz)
781-Frequency-xxxxx	F230	±100PPM	-20 ~ +70	0.750 ~ 50.000
781R-Frequency-xxxxx	F230R	±100PPM	-40 ~ +85	0.750 ~ 50.000
782-Frequency-xxxxx	F235	±50PPM	-20 ~ +70	0.750 ~ 50.000
782R-Frequency-xxxxx	F235R	±50PPM	-40 ~ +85	0.750 ~ 50.000
783-Frequency-xxxxx	F236	±25PPM	-20 ~ +70	0.750 ~ 50.000

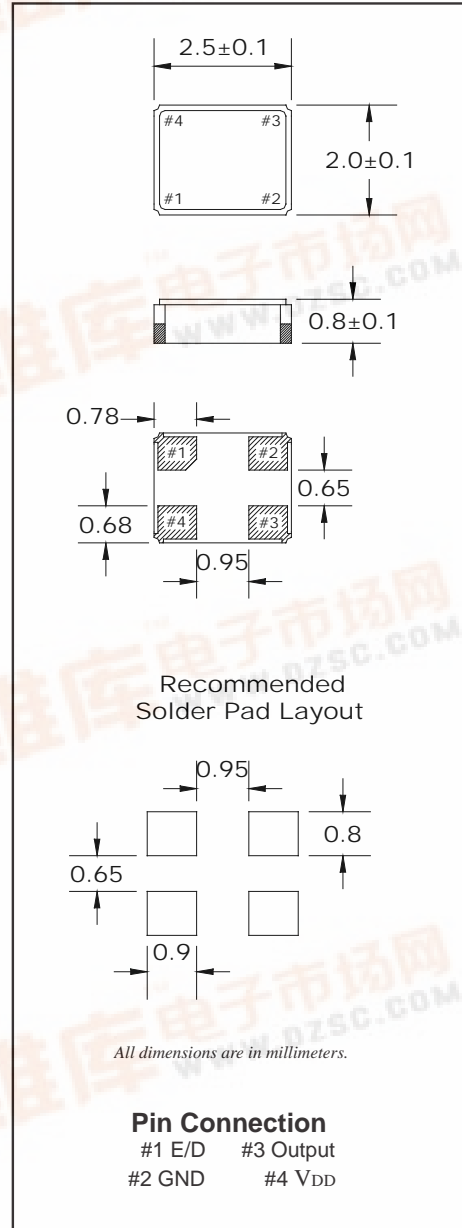
• ELECTRICAL CHARACTERISTICS

PARAMETERS	MAX (unless otherwise noted)
Frequency Range (Fo)	0.750 ~ 50.000 MHz
Storage Temperature Range (TSTG)	-55°C ~ +100°C
Supply Voltage (VDD)	3.3V ± 5%
Input Current (IDD)	
0.750 ~ 19.999 MHz	7mA
19.999+ ~ 39.999 MHz	13mA
39.999+ ~ 50.000 MHz	19mA
Output Symmetry (50% VDD)	45% ~ 55%
Rise Time (10% ~ 90% VDD) (TR)	10nS
Fall Time (90% ~ 10% VDD) (TF)	10nS
Output Voltage (VOL)	10% VDD
(VOH)	90% VDD Min
Output Current (IOL)	5mA Min
(IOH)	-5mA Min
Output Load (HCMOS)	15pF
Standby Current	5µA
Start-up Time (Ts)	10mS
Output Disable Time ²	150nS
Output Enable Time ²	10mS
Aging (Ta=25°C: per year)	± 5 PPM
Reflow Soldering Temp	260°C / 10 Seconds
Moisture Sensitivity Level (MSL)	1
Termination Finish	Au

¹ Inclusive of 25°C tolerance, operating temperature range, input voltage change, load change, shock, and vibration.

² An internal pullup resistor from pin 1 to pin 4 allows active output if pin 1 is left open.

Note: A 0.01µF capacitor should be placed between VDD (Pin 4) and GND (Pin2) to minimize power supply noise. All specifications subject to change without notice.



• ENABLE / DISABLE FUNCTION

INH (Pin 1)	OUTPUT (Pin 3)
OPEN	ACTIVE
'1' Level $V_{IH} \geq 80\% V_{DD}$	ACTIVE
'0' Level $V_{IL} \leq 20\% V_{DD}$	High Z



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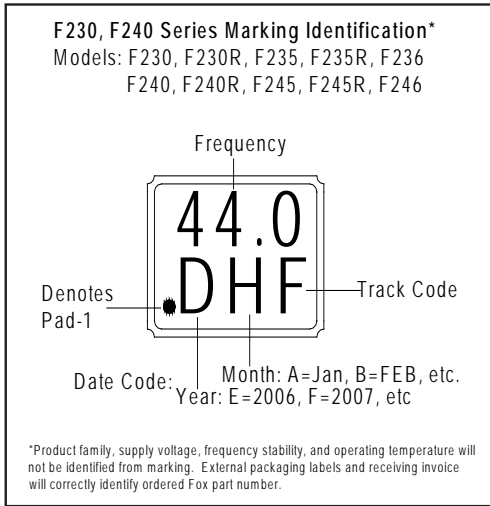
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Rev. 5/20/2008

Page 2 of 2

http://www.foxonline.com/need_a_sample.htm

Need a
Sample®



• TAPE SPECIFICATIONS (millimeters)							
MODEL	A	B	C	D	E	F	STD Reel QTY
F230 Series	∅1.5	4.0	8.0	7.5	16.0	2.5	3,000

• REEL SPECIFICATIONS (millimeters)							
MODEL	G	H	I	J	K	L	M
F230 Series	2.0	∅13	∅21	∅80	∅250	13.5	2.0

