

HCMOS 2.5x2mm 1.8V Oscillator



Model: F210 SERIES

RoHS & REACH Compliant

Rev. 9/17/2012

Page 1 of 2

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

Need a
Sample®

FEATURES

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

• PART NUMBER SELECTION

Part Number	Model Number	Frequency Stability ¹	Operating Temperature (°C)	Frequency Range (MHz)
819-Frequency-xxxxx	F210	±100PPM	-10 ~ +70	0.750 ~ 50.000
819A-Frequency-xxxxx	F210R	±100PPM	-40 ~ +85	0.750 ~ 50.000
819B-Frequency-xxxxx	F215	±50PPM	-10 ~ +70	0.750 ~ 50.000
819C-Frequency-xxxxx	F215R	±50PPM	-40 ~ +85	0.750 ~ 50.000
819D-Frequency-xxxxx	F216	±25PPM	-10 ~ +70	0.750 ~ 50.000
819E-Frequency-xxxxx	F216R	±25PPM*	-40 ~ +85	1.800 ~ 50.000

• ELECTRICAL CHARACTERISTICS

PARAMETERS	MAX (unless otherwise noted)
Frequency Range (Fo)	0.750 ~ 50.000 MHz
Storage Temperature Range (T _{STG})	-55°C ~ +100°C
Supply Voltage (V _{DD})	1.8V ± 5%
Input Current (I _{DD})	
0.750 ~ 10.000 MHz	2.5mA
10.000+ ~ 20.000 MHz	3.5mA
20.000+ ~ 30.000 MHz	4.0mA
30.000+ ~ 40.000 MHz	4.5mA
40.000+ ~ 50.000 MHz	5.0mA
Output Symmetry (50% V _{DD})	45% ~ 55%
Rise Time (10% ~ 90% V _{DD})	10nS
Fall Time (90% ~ 10% V _{DD})	10nS
Output Voltage (V _{OL})	10% V _{DD}
(V _{OH})	90% V _{DD} Min
Output Current (I _{OL})	2mA Min
(I _{OH})	-2mA Min
Output Load (HCMOS)	15pF
Standby Current	10µA
Start-up Time (T _s)	10mS
Output Disable Time ²	10µS
Output Enable Time ²	10mS
Reflow Soldering Temp	260°C / 10 Seconds
Moisture Sensitivity Level (MSL)	1
Termination Finish	Au

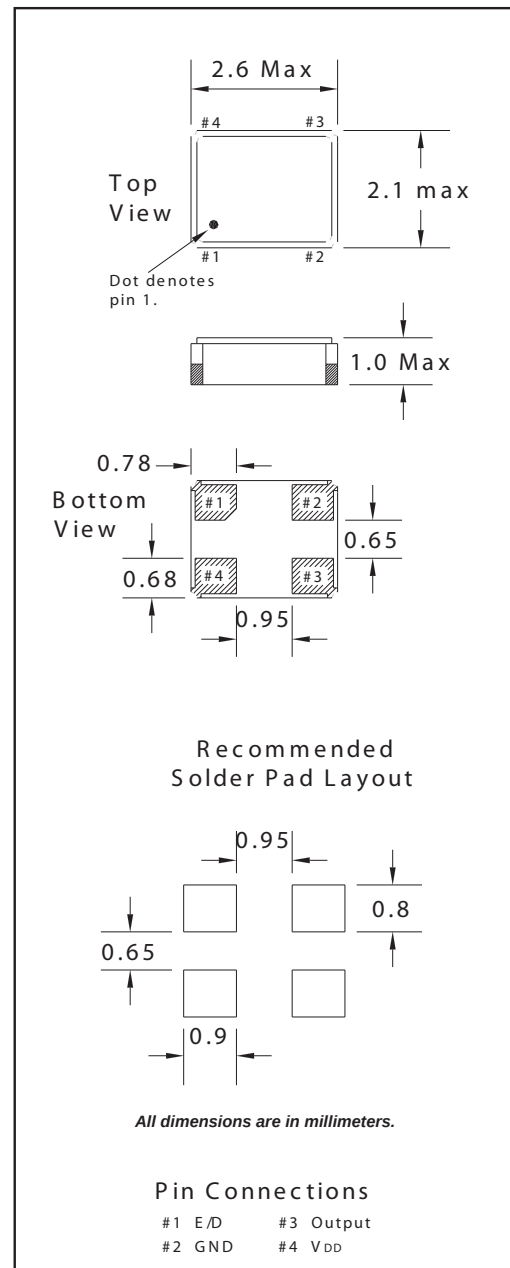
¹ Inclusive of 25°C tolerance, operating temperature range, input voltage change, load change, reflow, and one year aging *Excludes Shock/Vibration.

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 V_{DD} (Pin 4) and GND (Pin2) to minimize power supply noise.

~Drawing is for reference to critical specifications defined by size measurements.

Certain non-critical visual attributes, such as side castellations, reference pin shape, etc. may vary. All specifications subject to change without notice.



• ENABLE / DISABLE FUNCTION

Pin 1	OUTPUT (Pin 3)
OPEN ²	ACTIVE
'1' Level V _{IH} ≥ 70% V _{DD}	ACTIVE
'0' Level V _{IL} ≤ 30% V _{DD}	High Z

HCMOS 2.5x2mm 1.8V Oscillator



Model: F210 SERIES

RoHS & REACH Compliant

Rev. 9/17/2012

Page 2 of 2

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



• TAPE SPECIFICATIONS (millimeters)								• REEL SPECIFICATIONS (millimeters)							
MODEL	A	B	C	D	E	F	STD Reel QTY	MODEL	G	H	I	J	K	L	M
F210 Series	Ø1.5	4.0	4.0	3.5	8.0	1.15	3,000	F210 Series	2.0	Ø13	Ø21	Ø60	Ø180	9.0	2.0

