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With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



# HCMOS 32.768kHz SMD Oscillator



Model: F32K

RoHS Compliant / Pb Free

Rev. 5/28/2010

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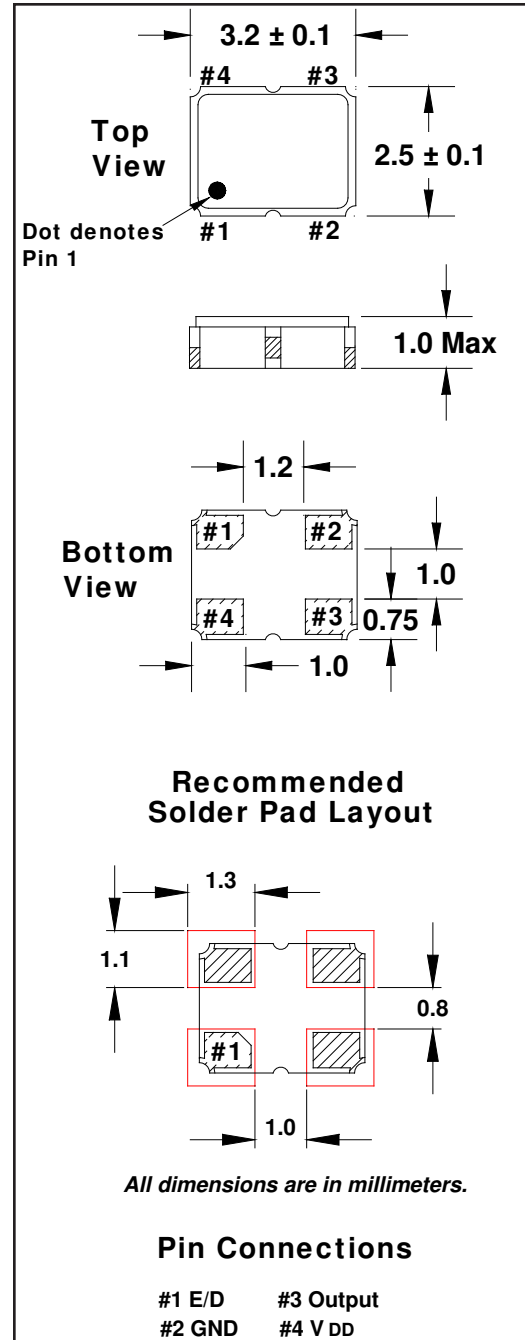
Need a Sample®

• PART NUMBER SELECTION <a href="#">Learn More</a> - Internet Required				
Part Number	Model Number	Frequency Stability	Operating Temperature (°C)	Frequency (kHz)
828-Frequency-xxxxx	F32K	-90 ~ +10PPM -140 ~ +10PPM	-20 ~ +70 -40 ~ +85	32.768

• ELECTRICAL CHARACTERISTICS	
PARAMETERS	MAX (unless otherwise noted)
Frequency Range (Fo)	32.768 kHz
Temperature Range	
Operating (TOPR)	-40°C ~ +85°C
Storage (TSTG)	-55°C ~ +125°C
Frequency Tolerance @ 25°C	+5 ± 20 PPM
Frequency Stability (ref @ +25°C)	
-20°C ~ +70°C	-90 ~ +10 PPM
-40°C ~ +85°C	-140 ~ +10 PPM
Supply Voltage (VDD)	3.3V ± 10% (Std.) 1.5V ~ 5.5V (Usable)
Input Current (IDD) (no load)	1.5 µA
Output Symmetry (50% VDD)	40% ~ 60%
Rise Time (10% ~ 90% VDD) (TR)	200nS
Fall Time (90% ~ 10% VDD) (TF)	200nS
Output Voltage (CL = 15pF, Ta = +25°C)	
(VOL)	0.4V
(VOH)	VDD-0.4V MIN
Output Load (HCMOS)	15 pF
Start-up Time (Ts)	
(VDD) = 1.5V ~ 5.5V, ta = -40°C ~ +85°C)	1S
Maximum Soldering Temp / Time	260°C / 10 Seconds
Moisture Sensitivity level (MSL)	1
Termination Finish:	Au

<sup>1</sup> An internal pullup resistor from pin 1 to pin 4 allows active operation if pin 1 is left open.  
Note: A 0.01µF bypass capacitor should be placed between VDD (Pin 4) and GND (Pin 2) to minimize power supply line noise.

The above specifications, having been carefully prepared and checked, is believed to be accurate at the time of publication; however, no responsibility is assumed by Fox Electronics for inaccuracies. All specifications subject to change without notice.



• ENABLE / DISABLE FUNCTION	
(Pin 1)	OUTPUT (Pin 3)
OPEN <sup>1</sup>	ACTIVE
'1' Level VIH ≥ 80% VDD	ACTIVE
'0' Level VIL ≤ 20% VDD	High Z

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• TAPE SPECIFICATIONS (millimeters)							
MODEL	A	B	C	D	E	F	STD Reel QTY
F32K	∅1.5	4.0	4.0	3.5	8.0	1.4	1,000

• REEL SPECIFICATIONS (millimeters)							
MODEL	G	H	I	J	K	L	M
F32K	2.5	∅13	∅22	∅60.2	∅178.0	8.0	1.6

