

Features

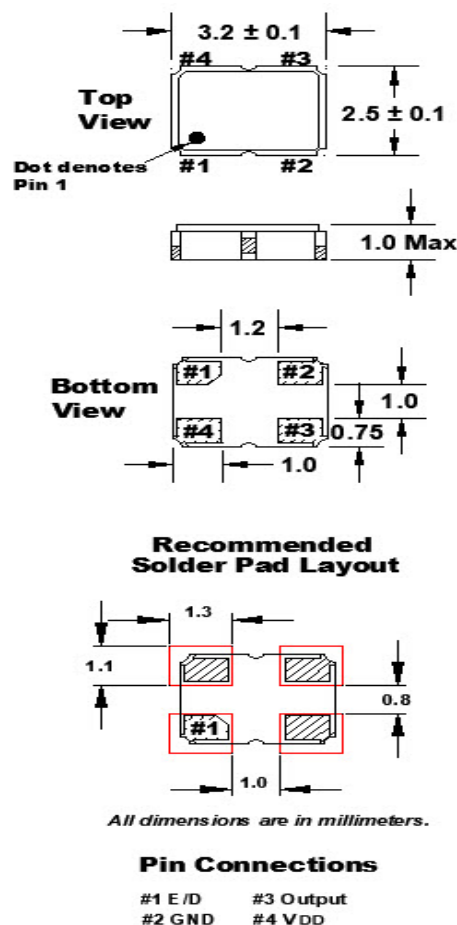
- HCMOS Output
- Stability of -170 ~ +10 PPM
- Temperature Ranges -40°C to +85°C

ELECTRICAL CHARACTERISTICS	
PARAMETERS	MAX (Unless otherwise noted)
Frequency (FO)	32.768 kHz
Temperature Range	
Operating (T _{OPR})	-40°C ~ +85°C
Storage (T _{STG})	-55°C ~ +125°C
Frequency Tolerance @ 25°C	-15 PPM to +25 PPM
Frequency Stability, ref. 25°C	
-20°C ~ +70°C	-120 ~ +10 PPM
-40°C ~ +85°C	-170 ~ +10 PPM
Supply Voltage (V _{DD})	3.3V ± 5% (Std.)
Input Current (I _{DD}) (no load)	1.5 µA
Output Symmetry (50% V _{DD})	40 % ~ 60 %
Rise/Fall Time (20%/80% V _{DD} Levels) (T _R /T _F)	200 nS
Output Voltage (V _{OL})	0.4V Max
(V _{OH})	V _{DD} - 0.4Vdc Min
Output Load (HCMOS)	15 pF
Start-up Time (T _S)	1 Second
Ta = -40°C ~ +85°C	
Maximum Soldering Temp / Time	260°C / 10 Seconds x 2 cycles
Moisture Sensitivity Level (MSL) per J-STD-033	N/A
Termination Finish	Au over Ni
Seal Method	Seam
Lead (Pb) Free	Yes, no exemptions
RoHS Compliant	Yes
REACH Compliant (latest version)	Yes

¹ Do not leave pad 1 (E/D) floating (no connect). Pad 1 must be tied to Vdd (logic 1) for proper oscillation on pad 3.

ENABLE / DISABLE FUNCTION	
E/D (pad 1 ¹)	Output (pad 3)
OPEN ¹	Not supported
'1' Level V _{IH} ≥ 70%V _{DD}	Active
'0' Level V _{IL} ≤ 30%V _{DD}	High Z

DIMENSIONS / MECHANICAL SPECIFICATIONS



Note:

*A 0.01µF capacitor should be placed between VDD (Pin 4) and GND (Pin2) to minimize power supply line noise.

*Dimensional 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

FO3HF

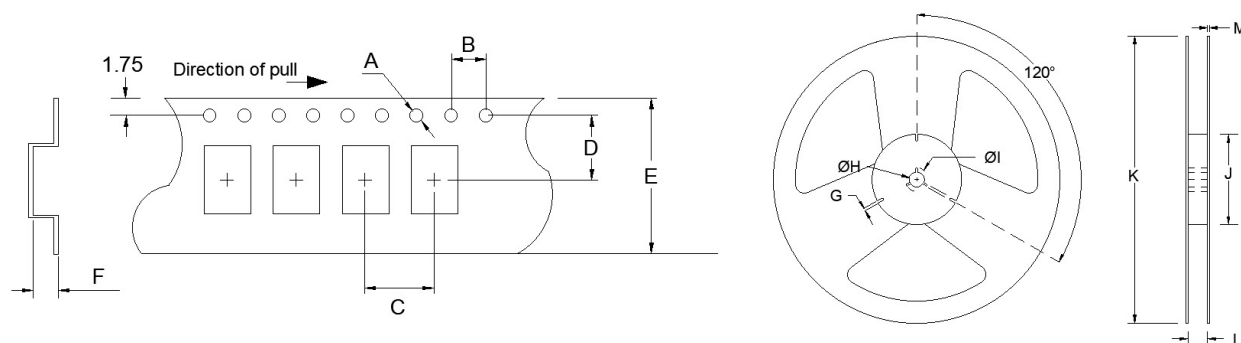
(Former FK32K Series)

3.2mm x 2.5mm

SMD Oscillator



TAPE SPECIFICATIONS (mm)							REEL SPECIFICATIONS (mm)						
A	B	C	D	E	F	REEL QTY	G	H	I	J	K	L	M
ø1.5	4.0	4.0	3.5	8.0	1.4	-T3 = 3,000 default -T1 = 1,000	2.5	ø13	ø22	ø60	ø178	8.0	1.6



Available Options & Part Identification for 32.768 kHz SMD Oscillator

Sample PN: **FO3HFCYM0.032768-T3**

F	O3HF	C	Y	M	0.032768	-T3
<u>Fox</u>	<u>Model Number</u>	<u>Voltage</u> C = 3.3V±5%	<u>Stability</u> Y = -170 ~ +10PPM	<u>Operating Temperature</u> M = -40 to +85°C	<u>Frequency (MHz)</u>	<u>Values Added Options</u> Blank = Bulk T1 = 1,000 pcs T3 = 3,000 pcs

Reliability Test Conditions

Please contact Abracon Quality Assurance department