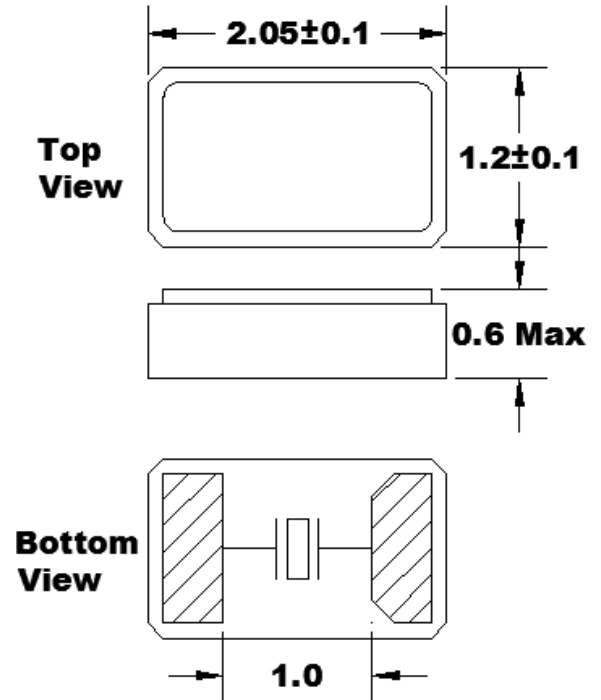


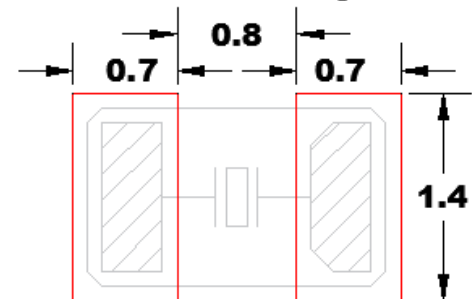


- AEC Q200 Qualified
- TS-16949 QMS
- Temperature Range of -40°C to +125°C

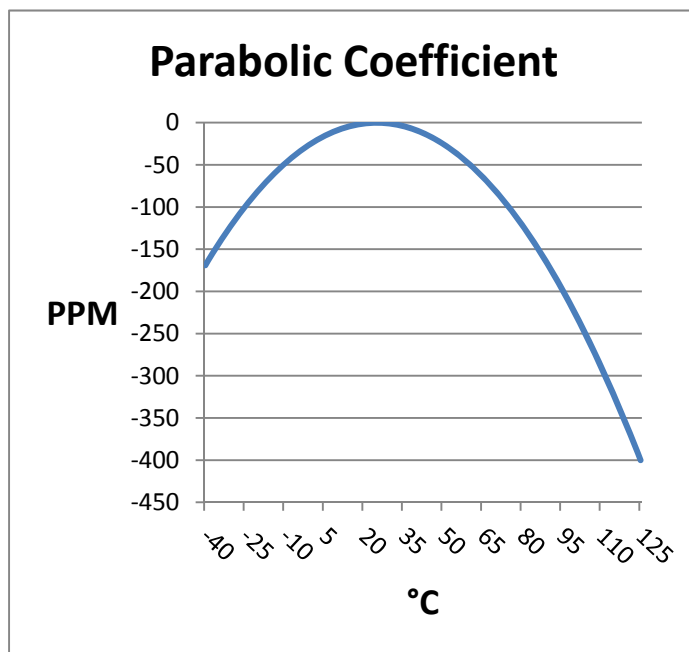
SPECIFICATIONS	
PARAMETERS	MAX (unless otherwise noted)
Frequency	32.768 kHz
Frequency Tolerance @ 25°C	±20 PPM
Frequency Stability (Temperature Coefficient)	-0.04 PPM / (Δ°C) <sup>2</sup>
Temperature Range	
Turnover (T <sub>o</sub> )	+20°C ~ +30°C
Operating (T <sub>OPR</sub> )	-40°C ~ +125°C
Storage (T <sub>STG</sub> )	-40°C ~ +125°C
Equivalent Series Resistance (R <sub>S</sub> )	90 kΩ
Load Capacitance (C <sub>L</sub> )	(See options on page 2)
Insulation Resistance @ 100VDC	500MΩ Min
Drive Level	1.0uW 0.1uW Typ
Aging per year @ 25°C (first year)	±3 PPM
Maximum Soldering Temp / Time	260°C / 10 Seconds
Moisture Sensitivity Level (MSL)	1
Termination Finish	Au over Ni
Seal Method	Seam Seal
Lead (Pb) Free	Yes
RoHS/Reach Compliant	Yes



### Recommended Solder Pad Layout



**All dimensions are in millimeters.**

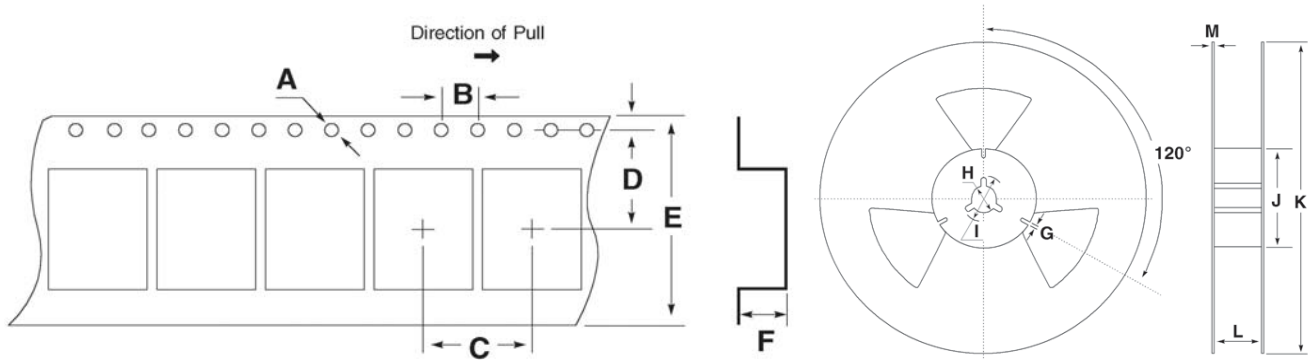


Note: Dimensional drawing is for reference to critical specifications defined by size measurements. Certain non-critical visual attributes, such as side castellations, etc. may vary.





• TAPE SPECIFICATIONS (millimeters)							• REEL SPECIFICATIONS (millimeters)						
A	B	C	D	E	F	STD Reel QTY	G	H	I	J	K	L	M
Ø1.5	4.0	4.0	3.5	8.0	0.75	3,000	2.0	Ø13	Ø21	Ø60	Ø180	9.0	1.2



### Available Options & Part Identification for SMD Tuning Fork Crystal K12A F K12A E I H I 0.032768

F	K12A	E	I	H	I	0.032768
<u>FOX</u>	<u>Model Number</u>	<u>Tolerance</u> E=20ppm	<u>Stability</u> I = -0.04 PPM / (Δ°C)	<u>Load Capacitance</u> H=12.5pF B=6pF V=7pF W=9pF	<u>Operating Temperature</u> I = -40 ~ +125 °C	<u>Frequency (MHz)</u>



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<p>© Copyright 2017 Fox Electronics, All rights reserved</p>	<b>Title / Description:</b> K12A STANDARD SPECIFICATIONS		
	<b>Drawing Number:</b> 101166		<b>Size:</b> A
	<b>Part Number:</b>		<b>Cage:</b> 61429
	<b>Draftsperson:</b> CMR	<b>Approved:</b> BEC	<b>Revision Date:</b> 09/27/2017