



SMD Tuning Fork

KFSR
(former FSRLF)
DATASHEET

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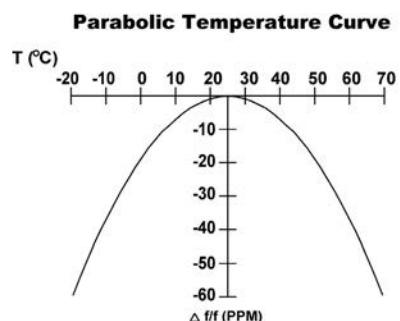
FEATURES

- Miniature Package
- 2.5mm Height
- Long Term Stability
- Tape and Reel (3,000 pcs. STD)

• SPECIFICATIONS

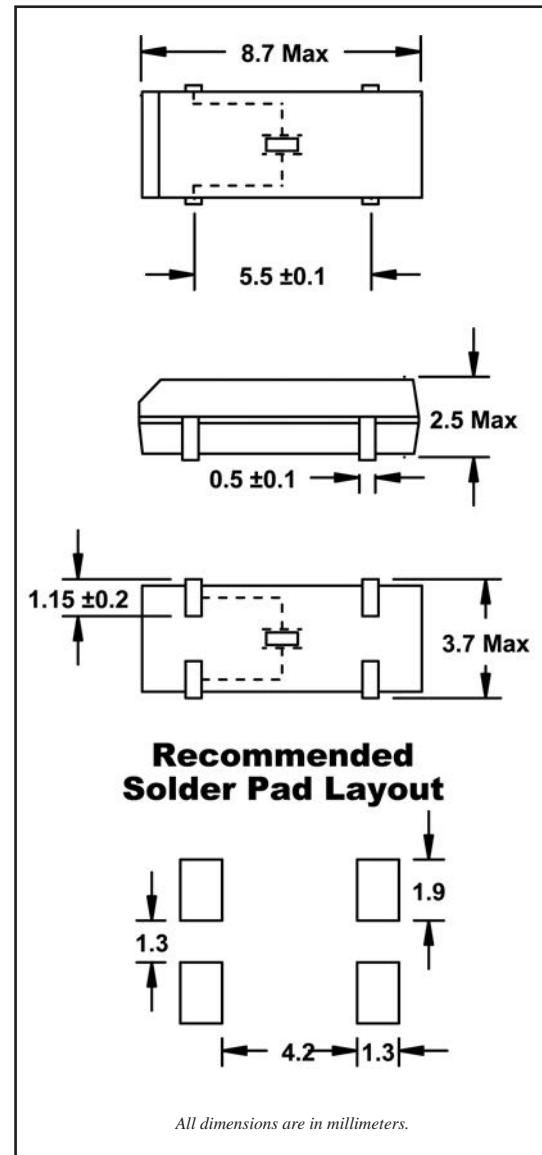
PARAMETERS	MAX (unless otherwise noted)
Frequency	32.768 kHz
Frequency Tolerance @ 25°C	±20 PPM
Frequency Stability	
Temperature Coefficient	-0.04 PPM / (Δ°C) ²
Temperature Range	
Turnover (TO)	+20°C ~ +30°C
Operating (TOPR)	-40°C ~ +85°C
Storage (TSTG)	-55°C ~ +125°C
Equivalent Series Resistance (Rs)	50 kΩ
Load Capacitance (CL)	12.5 pF (Standard) 6 pF (Optional)
Insulation Resistance @ 100VDC	500 MΩ Min
Drive Level	1.0 μW
Aging per year	±3 PPM
Termination Finish	100% Sn
RoHS Compliant	Yes

All specifications subject to change without notice.



To determine frequency stability, use parabolic curvature (K).
For example: What is stability at 45°C?

- 1) Change in T (°C) = 45-25 = 20°C
- 2) Change in frequency = -0.04 PPM * (Δ°C)²
= -0.04 PPM * (20)²
= -16.0 PPM



Revision: November 15, 2016



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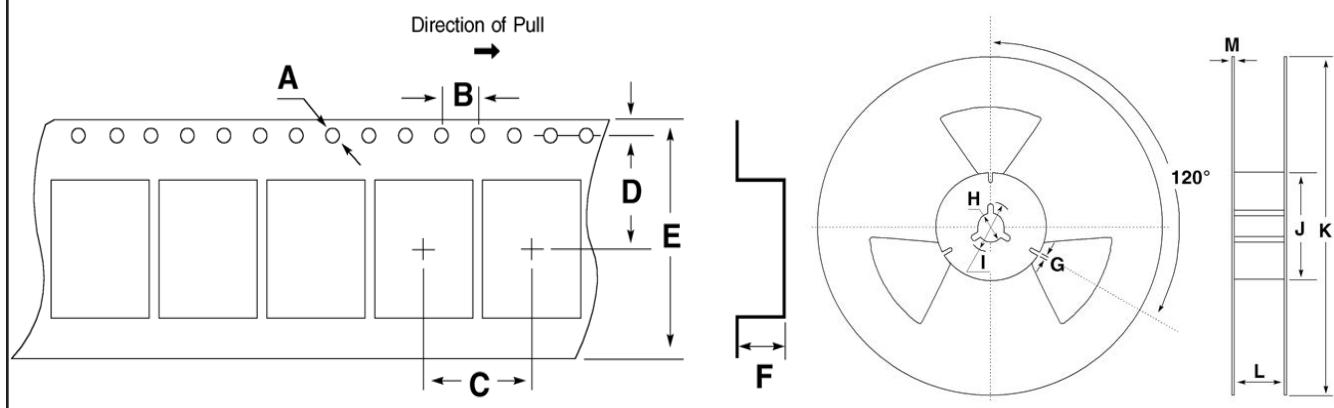
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• TAPE SPECIFICATIONS (millimeters)

MODEL	A	B	C	D	E	F	STD Reel QTY
KFSR	Ø1.5	4.0	8.0	7.5	16.0	2.7	3,000

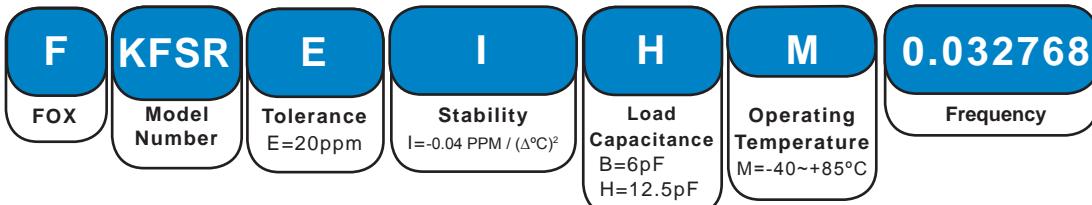
• REEL SPECIFICATIONS (millimeters)

MODEL	G	H	I	J	K	L	M
KFSR	2.0	Ø13	Ø21	Ø50/100	Ø330	16.4	2.0



Available Options & Part Identification for Crystal Model Number KFSR

F KFSR E I H M 0.032768



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