

# Plastic Encased SMD Crystal



Model: FPXLF

RoHS Compliant

Rev. 3/18/2008

Page 1 of 2

[http://www.foxonline.com/need\\_a\\_sample.htm](http://www.foxonline.com/need_a_sample.htm)

Need a  
Sample®

## FEATURES

- Low Cost
- Stocking Standard
- Plastic Encapsulated
- Tape and Reel (1,000 pcs. STD)

## OPTIONS

- Tolerances to < 20 PPM
- Stabilities to < 20 PPM
- Temperatures to -40°C ~ +85°C

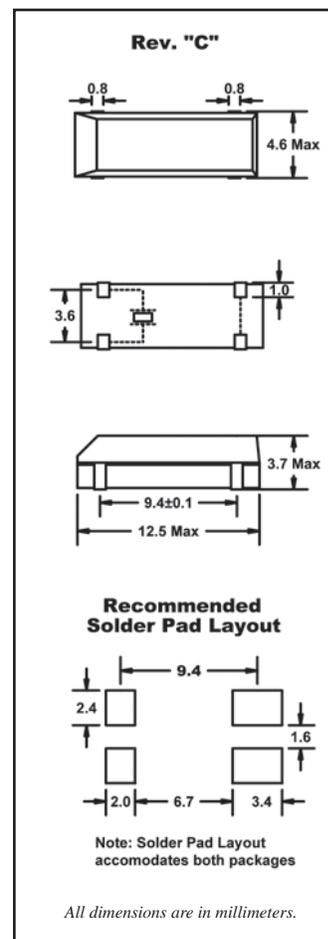
This model has long lead times.  
Click for alternative.

• PART NUMBER <a href="#">Learn More</a> - Internet Required		
Part Number	Model Number	Frequency Range (MHz)
256LF-Frequency-xxxxx	FPXLF	3.579545 ~ 90.000

• STANDARD SPECIFICATIONS <sup>1</sup>	
PARAMETERS	MAX (unless otherwise noted)
Frequency Range	3.579545 ~ 90.000MHz
Frequency Tolerance @ 25°C	±50 PPM
Frequency Stability, ref @ 25°C Over Operating Temp Range	±50 PPM
Temperature Range	
Operating (TOPR)	-10°C ~ +70°C
Storage (TSTG)	-55°C ~ +125°C
Shunt Capacitance (Co)	7.0 pF
Load Capacitance (CL)	10 pF ~ Series (Customer Specified)
Drive Level	0.1 mW
Aging per year	±5 PPM

<sup>1</sup> Other tolerances, stabilities & operating temperature ranges available. Consult Fox Customer Service for specific requirements and availability of Rev "A".  
All specifications subject to change without notice.

Frequency Range (MHz)	Operating Mode	Max ESR Ω
3.579545 ~ 4.000	Fundamental	200
4.000+ ~ 5.000	Fundamental	150
5.000+ ~ 6.000	Fundamental	120
6.000+ ~ 7.000	Fundamental	100
7.000+ ~ 9.000	Fundamental	80
9.000+ ~ 13.000	Fundamental	60
13.000+ ~ 20.000	Fundamental	40
20.000+ ~ 30.000	Fundamental	30
30.000+ ~ 90.000	3rd OT	100



# Plastic Encased SMD Crystal



Model: FPXLF

RoHS Compliant

Rev. 3/18/2008

Page 2 of 2

[http://www.foxonline.com/need\\_a\\_sample.htm](http://www.foxonline.com/need_a_sample.htm)

Need a  
Sample®

## • FOX STANDARD SPECIFICATIONS

PARAMETER	FPXLF
Frequency Tolerance @ 25°C	±50PPM
Frequency Stability	±100PPM
Operating Temperature Range	-20°C ~ +70°C

## • FPXLF Standard Crystals

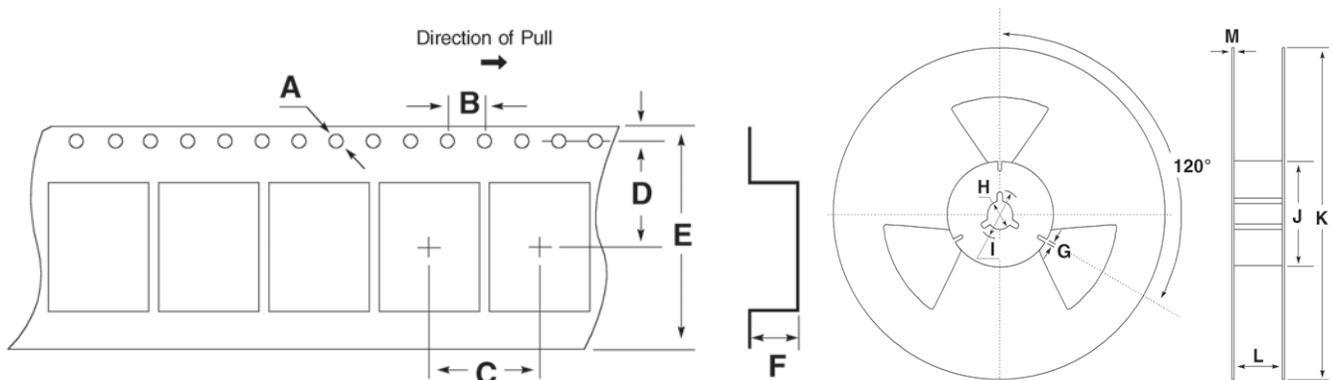
Frequency	CL	FPXLF Part Number	ESR Ω Max
3.579545	18pF	FPXLF036S	200
3.686400	SERIES	FPXLF0368S	200
3.686400	20pF	FPXLF0368-20	200
4.000000	20pF	FPXLF040	150
4.915200	20pF	FPXLF049-20	150
7.372800	20pF	FPXLF073-20	80
8.000000	SERIES	FPXLF080	80
8.000000	20pF	FPXLF080-20	80
10.000000	20pF	FPXLF100-20	60
11.059200	20pF	FPXLF115-20	60
12.000000	20pF	FPXLF120-20	60
14.318180	20pF	FPXLF143-20	40
16.000000	SERIES	FPXLF160	40
16.000000	20pF	FPXLF160-20	40
20.000000	20pF	FPXLF200-20	30
25.000000	20pF	FPXLF250F-20	30

## • TAPE SPECIFICATIONS (millimeters)

MODEL	A	B	C	D	E	F	STD Reel QTY
FPXLF	∅1.5	4.0	12.0	11.5	24.0	5.5	1,000

## • REEL SPECIFICATIONS (millimeters)

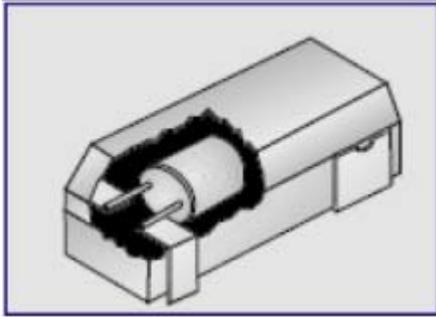
MODEL	G	H	I	J	K	L	M
FPXLF	2.0	∅13	∅21	∅100	∅250	25.5	2.0



# Due to the long lead times for plastic FPXLF parts?

**We, at Fox, thought you might be interested in alternatives that do not require that you change your circuit board?**

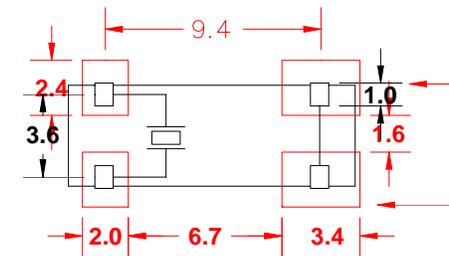
*Alternative is fully RoHS Compliant / Pb Free – FPXLF uses Exemption 7a*



The FPXLF layout is one of the earliest conversions from Thru-Hole, to surface mount. As such, the 2 terminations on the right are not used for anything in the circuit. The pads are there only to provide additional mechanical adherence to the circuit board.

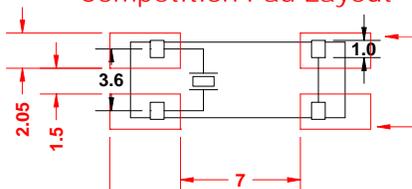
The circuit only uses the 2 pads on the left. The pads on the right can remain empty and the circuit will work normally.

Fox FPXLF on the **Recommended Fox Pad Layout**



Even if you are using one of the competitor recommended layouts, it is only the 2 pads on the left. If an alternative will fit on the smaller Fox recommendation, it will fit on the competitor's layout.

Fox FPXLF on the **Recommended Oversized Competition Pad Layout**

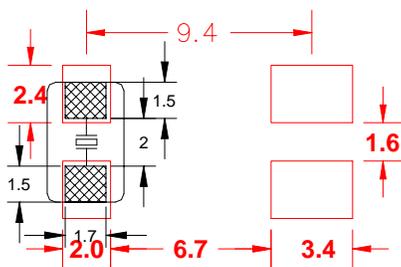


For Frequencies above 8MHz<sup>\*\*</sup>, there is an alternative, the Fox model FQ5032A. It is available with 25°C accuracy of ±20ppm, ±25ppm, ±30ppm, ±50ppm, or ±100ppm. And the same values for stability between -20°C & +70°C. For -40°C to +85°C, it is available at ±30ppm, ±50ppm, or ±100ppm.

**More capable than the model FPXLF – and can be purchased at a lower cost!**

And it fits very well on the active 2 pads of the model FPXLF.

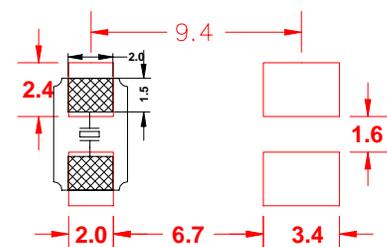
**FQ5032A on the Recommended Fox Pad Layout**



For even tighter Tolerance and Temperature Stability, the model FX532AS is available.

To fit on the same 2 pads

(Call for details) **FX532AS on the Recommended Fox Pad Layout**



<sup>\*\*</sup> Limited available frequencies between 8MHz and 10MHz