

Specification for Approval

Customer	
Product Name	Wire Wound Molded SMD Power Inductors
Customer P/N:	
Cjiang P/N:	FXL series
REMARK:	Revised] SPEC No.:

•深圳市长江微电科技有限公司

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	Version change history							
Rev	Date	Description	APPROVED	CHECKED	DRAWN			
1.0	2023/11/17	Document formulation	徐舒霞	马月	朱小娟			
2.0	2024/1/25	Increase Isat/Irms Max	BOND	MIKO	МІКО			
3.0	2024/3/25	Merge all sizes	BOND	XUETING	XUETING			

Caution:

All products listed in this specification are developed, designed and intended for use in general electronics equipment. The products are not designed or Warranted to meet the requirements of the applications listed below, whose performance and/or quality require especially high reliability, or whose failure, malfunction or trouble might directly cause damage to society, person, or property. Please understand that we are not responsible for any damage or liability caused by use of the products in any of the applications below. Please contact us for more details if you intend to use our products in the following applications.

- 1. Aircraft equipment.
- 2. Aerospace equipment.
- 3. Undersea equipment.
- 4. nuclear control equipment.
- 5. military equipment.
- 6. Power plant equipment.
- 7. Medical equipment.
- 8. Transportation equipment (automobiles, trains, ships,etc.)
- 9. Traffic signal equipment.
- 10. Disaster prevention / crime prevention equipment.
- 11. Data-processing equipment.
- 12. Applications of similar complexity or with reliability requirements comparable to the applications listed in the above.

深圳市长江微电科技有限公司

SZ CJIANG TECHNOLOGY CO.,LTD



introduction

- Halogen Free ,ROHS compliance
- High rated current
- 125 [°]C maximum total temperature operation
- 4.75 x 4.45 x 1.2mm maximum surface mount package
- Low core loss
- Ultra low buzz noise due to molding construction

Applications

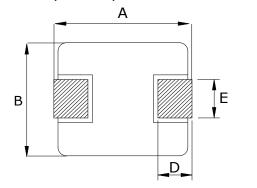
- Laptops and PCs
- Switch and servers
- Base stations
- DC/DC converters
- Battery powered devices
- SSD modules

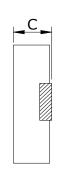
Product Identification

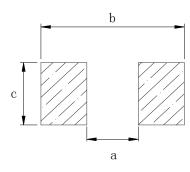
<u>FXL</u> <u>0412</u> <u>--1R5</u> - <u>M</u> <u>(4)</u>

- ① FXL ----- Series name
- ② 0412 ----- Dimension
- ③ 1R5 ----- Inductance Value (1R5 = 1.5µH)
- 4 M ----- Inductance Tolerance (M= \pm 20%)

Dimensions (unit:mm)







Recommend Land Pattern

series	А	В	С	D	Е	a typ	b typ	c typ
FXL0412	4.4±0.35	4.2±0.25	1.0±0.2	0.8±0.3	2.0±0.3	2.2	5.2	2.5
FXL0420	4.4±0.35	4.2±0.25	1.8±0.2	0.8±0.3	2.0±0.3	2.2	5.2	2.5
FXL0518	5.4±0.35	5.2±0.2	1.6±0.2	1.2±0.2	2.2±0.3	2.2	6	2.5
FXL0530	5.4±0.35	5.2±0.2	2.8±0.2	1.2±0.2	2.2±0.3	2.2	6	2.5
FXL0615	7.0±0.3	6.6±0.2	1.3±0.2	1.6±0.3	3.0±0.3	3.7	8.4	3.5
FXL0618	7.0±0.3	6.6±0.2	1.6±0.2	1.6±0.3	3.0±0.3	3.7	8.4	3.5
FXL0624	7.0±0.3	6.6±0.2	2.2±0.2	1.6±0.3	3.0±0.3	3.7	8.4	3.5
FXL0630	7.0±0.3	6.6±0.2	2.8±0.2	1.6±0.3	3.0±0.3	3.7	8.4	3.5
FXL0640	7.0±0.3	6.6±0.2	3.8±0.2	1.6±0.3	3.0±0.3	3.7	8.4	3.5
FXL0650	7.0±0.3	6.6±0.2	4.8±0.2	1.6±0.3	3.0±0.3	3.7	8.4	3.5
FXL0840	8.8±0.4	8.2±0.3	3.8±0.2	1.4±0.3	5.0±0.3	4	9.5	5.5
FXL1030	11.5MAX	10.0±0.3	2.8±0.2	2.0±0.5	3.0±0.5	5.4	13.6	4.1
FXL1040	11.5MAX	10.0±0.3	3.8±0.2	2.0±0.5	3.0±0.5	5.4	13.6	4.1
FXL1050	11.5MAX	10.0±0.3	4.8±0.2	2.0±0.5	3.0±0.5	5.4	13.6	4.1
FXL1340	13.45±0.35	12.8±0.5	4.0MAX	2.0±0.5	See remarks	8	14.5	5.5
FXL1350	13.45±0.35	12.6±0.3	4.8±0.2	2.0±0.5	See remarks	8	14.5	5.5
FXL1360	13.45±0.35	12.6±0.3	5.8±0.2	2.0±0.5	See remarks	8	14.5	5.5
FXL1365	13.45±0.35	12.6±0.3	6.5MAX	2.0±0.5	5.0±0.3	8	14.5	5.5
FXL1770	17.15±0.35	17.15MAX	7.0MAX	2.5±0.5	12.0±0.3	11.2	18.2	12.8
FXL2213	23.5±0.5	22.0±0.3	12.6±0.4	5.0±0.4	19.0±0.3	12.5	24	19.6

Remarks:

series	E	Dimensions
FXL1340 3.85±0.5 5.0±0.3		R22/R47
		R68/R82/1R0/1R5/2R2/3R3/4R7/6R8/100/150/220
EVI 1250	3.85±0.5	R22/R36/R50/R68/R82/1R0/1R5/2R2
FXL1350	5.0±0.3	3R3/4R7/6R8/8R2/100/150/220/330/470
EVI 4260	3.85±0.5	1R0/2R2
FXL1360	5.0±0.3	4R7/5R6/6R8/8R2/100/150/180/220/270/330/470/680/101/121/151

Marking

The inductor is marked with a 3-digit code

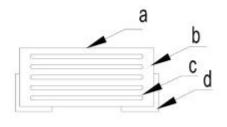
Nominal Inductance						
Example	Nominal Value					
1R0	1.0 µH					
100	10 µH					
101	100 µH					

Note: Using Ink for marking

1R0

Structure and Components

Symbol	Components	Material
а	MARKING	Ink (black)
b	CORE	Alloy Sponge Powder
С	WIRE	Polyurethane copper wire
d	Terminal	Copper plated with Sn



Appendix A: Electrical Characteristics

FXL0412-XXX series

Part No.	Inductance	DC Resistance	Saturation Current	Saturation Current	Heating Rating Current	Heating Rating Current
	L0 (µH)	DCR (mΩ)	Isat (A)	Isat (A)	Irms (A)	Irms (A)
	±20 %, 100 kHz, 1V	MAX.	MAX	TYP.	MAX	TYP.
FXL0412-R15-M	0.15	9	12	15	6.8	7.5
FXL0412-R22-M	0.22	11	8.8	11	6.5	7
FXL0412-R33-M	0.33	19	6.7	8.4	5.7	6.5
FXL0412-R47-M	0.47	21	5.4	6.8	5.2	6
FXL0412-R68-M	0.68	36	4.8	6	4.2	4.7
FXL0412-1R0-M	1.0	47	4.4	5.5	3.8	4.5
FXL0412-1R5-M	1.5	75	3.2	4	2.7	3.25
FXL0412-2R2-M	2.2	83.5	2.4	3.5	2.2	2.75
FXL0412-3R3-M	3.3	165	2.38	3	1.77	2
FXL0412-4R7-M	4.7	195	1.80	2.8	1.45	1.8

FXL0420-XXX series

Part No.	Inductance	DC Resistance	Saturation Current	Saturation Current	Heating Rating Current	Heating Rating Current
	L0 (µH)	DCR (mΩ)	Isat (A)	Isat (A)	Irms (A)	Irms (A)
	±20 %, 100 kHz, 1V	MAX.	MAX	TYP.	MAX	TYP.
FXL0420-R10-M	0.1	4	17.6	22	11.2	13
FXL0420-R22-M	0.22	6.6	10	12.5	8.2	9.5
FXL0420-R33-M	0.33	11	9.6	12	8.6	10
FXL0420-R47-M	0.47	14	7.6	9.5	6.65	7.5
FXL0420-R56-M	0.56	16	7.2	10	6.1	7
FXL0420-R68-M	0.68	18	6.4	9	6.15	7
FXL0420-1R0-M	1.0	27	5.6	7	5.4	6
FXL0420-1R2-M	1.2	27	5.2	7	5.4	6
FXL0420-1R5-M	1.5	46	4.4	6	4.3	5
FXL0420-2R2-M	2.2	58	4.0	5	3.8	4.5
FXL0420-3R3-M	3.3	87	2.8	4	2.8	3.3
FXL0420-4R7-M	4.7	105	2.4	3	2.2	2.8
FXL0420-6R8-M	6.8	175	2.0	2.5	1.9	2.4
FXL0420-100-M	10	282	1.6	2.2	1.3	1.6
FXL0420-220-M	22	363	1.12	1.4	0.9	1.2

FXL0518-XXX series

Part No.	Inductance	DC Resistance	Saturation Current	Saturation Current	Heating Rating Current	Heating Rating Current
	L0 (µH)	DCR (mΩ)	Isat (A)	Isat (A)	Irms (A)	Irms (A)
	±20 %, 100 kHz, 1V	MAX.	MAX	TYP.	MAX	TYP.
FXL0518-R47-M	0.47	9	9.6	15.5	9.5	10.5
FXL0518-R56-M	0.56	10	8.8	15	8.2	9.5
FXL0518-R68-M	0.68	13.8	9.3	11.2	7.7	8.9
FXL0518-1R0-M	1.0	17	7.2	9	7.2	8
FXL0518-1R5-M	1.5	26	6.4	9	6.6	7.5
FXL0518-2R2-M	2.2	35	4.8	6.5	4.2	5
FXL0518-3R3-M	3.3	58	3.84	5	3.8	4.5
FXL0518-4R7-M	4.7	85	3.2	4	3.0	3.5
FXL0518-6R8-M	6.8	120	2.72	3.4	2.4	2.8
FXL0518-100-M	10	155	2	3	2.2	2.5

FXL0530-XXX series

Part No.	Inductance	DC Resistance	Saturation Current	Saturation Current	Heating Rating Current	Heating Rating Current
	L0 (µH)	DCR (mΩ)	Isat (A)	Isat (A)	Irms (A)	Irms (A)
	±20 %, 100 kHz, 1V	MAX.	MAX	TYP.	MAX	TYP.
FXL0530-R10-M	0.10	3	24	33	23	25
FXL0530-R20-M	0.20	3.9	11.6	14.5	13	14
FXL0530-R33-M	0.33	5.5	14.4	18	13.1	14
FXL0530-R47-M	0.47	8.5	9.6	12	10	11
FXL0530-R68-M	0.68	12	9.2	11.5	8.2	9.0
FXL0530-1R0-M	1.0	14	8	11	7.8	8.5
FXL0530-1R2-M	1.2	16	7.6	11	7.85	8.5
FXL0530-1R5-M	1.5	25	7.2	8.5	7.6	8.2
FXL0530-2R2-M	2.2	29	5.6	7.5	6.4	7.0
FXL0530-3R3-M	3.3	38	4.8	6.0	5	5.5
FXL0530-4R7-M	4.7	60	3.68	5	4	4.5
FXL0530-6R8-M	6.8	90	2.88	4	2.9	3.5
FXL0530-100-M	10	125	2.8	3.5	2.8	3.2
FXL0530-150-M	15	180	2.0	2.2	1.6	1.7
FXL0530-220-M	22	248	2.0	2.3	1.5	1.7

FXL0615-XXX series

Part No.	Inductance	DC Resistance	Saturation Current	Saturation Current	Heating Rating Current	Heating Rating Current
	L0 (µH)	DCR $(m\Omega)$	Isat (A)	Isat (A)	Irms (A)	Irms (A)
	±20 %, 100 kHz, 1V	MAX.	MAX	TYP.	MAX	TYP.
FXL0615-R47-M	0.47	8.5	14.16	16	8.85	10
FXL0615-R56-M	0.56	11	12.38	14	7.96	9
FXL0615-R68-M	0.68	12	10.62	12	7.52	8.5
FXL0615-R82-M	0.82	17	8.85	10	7.08	8
FXL0615-1R0-M	1.0	21	7.96	9	5.3	6
FXL0615-1R5-M	1.5	45	6.2	7	3.4	4
FXL0615-2R2-M	2.2	54	6.19	7	3.36	3.8
FXL0615-3R3-M	3.3	63	4.87	5.5	3.1	3.5
FXL0615-4R7-M	4.7	85	4.42	5	2.83	3.2
FXL0615-6R8-M	6.8	135	3.54	4	2.21	2.5
FXL0615-100-M	10	175	2.65	3	1.77	2

FXL0618-XXX series

Part No.	Inductance	DC Resistance	Saturation Current	Saturation Current	Heating Rating Current	Heating Rating Current
	L0 (µH)	DCR (mΩ)	Isat (A)	Isat (A)	Irms (A)	Irms (A)
	±20 %, 100 kHz, 1V	MAX.	MAX	TYP.	MAX	TYP.
FXL0618-R10M	0.1	2.3	30.4	38	23	25
FXL0618-R22M	0.22	3.5	19.2	24	20	22
FXL0618-R47M	0.47	8.4	16.0	18	10	11.5
FXL0618-R68M	0.68	12	13.2	17	8.4	9.5
FXL0618-1R0M	1.0	16	9.6	14	7.6	8.5
FXL0618-1R5M	1.5	26	7.36	12	7.1	8.0
FXL0618-2R2M	2.2	35	6.4	8	6.2	7
FXL0618-3R3M	3.3	50	4.8	6.5	3.8	4.5
FXL0618-4R7M	4.7	62	4.0	5	3.5	4
FXL0618-6R8M	6.8	110	3.6	4.5	2.4	3.0
FXL0618-100M	10	155	3.2	4	1.95	2.3
FXL0618-220M	22	350	1.84	2.3	1.4	1.8

FXL0624-XXX series

Part No.	Inductance	DC Resistance	Saturation Current	Saturation Current	Heating Rating Current	Heating Rating Current
	L0 (µH)	DCR (mΩ)	Isat (A)	Isat (A)	Irms (A)	Irms (A)
	±20 %, 100 kHz, 1V	MAX.	MAX	TYP.	MAX	TYP.
FXL0624-R22M	0.22	3	24	34	19	21
FXL0624-R33M	0.33	4.1	19.6	24.5	16	18
FXL0624-R47M	0.47	5.1	16	22	13.5	15
FXL0624-R56M	0.56	6.5	13.6	17	11.5	13
FXL0624-R68M	0.68	7	12.8	16	10.5	12
FXL0624-1R0M	1.0	13.5	12.0	16	8	9
FXL0624-1R5M	1.5	20	10.8	15	7	9
FXL0624-2R2M	2.2	28	8	10	6.2	7
FXL0624-3R3M	3.3	39	6.4	8	4.8	5.5
FXL0624-4R7M	4.7	50	5.2	7.5	4.3	5
FXL0624-6R8M	6.8	70	4.8	6	3.2	4
FXL0624-100M	10	101	3.2	4	2.4	3.1
FXL0624-150M	15	160	2.64	3.3	2.0	2.5
FXL0624-220M	22	230	2.0	2.5	1.6	2

FXL0630-XXX series

	Inductance	DC Resistance	Saturation Current		1	Heating Rating Current	
Part No.	L0 (µH)	DCR (mΩ)	Isat	(A)	Irms (A)		
	±20 %, 100 kHz, 1V	MAX.	Max	Тур	Max	Тур	
FXL0630-R10-M	0.1	0.99	48	60	35	40	
FXL0630-R15-M	0.15	2.4	35	41	25	30	
FXL0630-R22-M	0.22	3	32	34	21	24	
FXL0630-R24-M	0.24	3.1	22.4	28	18.4	23	
FXL0630-R33-M	0.33	3.5	22	25	20	21	
FXL0630-R47-M	0.47	4.1	18	20	16	18	
FXL0630-R56-M	0.56	4.5	16	18	15	16.5	
FXL0630-R68-M	0.68	5.3	15	17	14.5	16	
FXL0630-R82-M	0.82	6.0	14	16	13	14	
FXL0630-1R0-M	1.0	7.4	13.5	15	11.2	12	

FXL0630-1R5-M	1.5	12.1	12	14	9.5	12
FXL0630-2R2-M	2.2	15	10.5	12	8.5	9.5
FXL0630-2R7-M	2.7	20	9	10	8.2	8.8
FXL0630-3R3-M	3.3	22	8.7	9.5	8	8.5
FXL0630-4R7-M	4.7	33	7.5	9	5.5	6
FXL0630-5R6-M	5.6	42	5.5	6.5	5	5.5
FXL0630-6R8-M	6.8	48	5.2	6	4.5	5
FXL0630-8R2-M	8.2	60	5	5.5	4	5
FXL0630-100-M	10	68	4.9	5.5	3.8	4.5
FXL0630-150-M	15	115	3.5	4.0	2.6	3
FXL0630-220-M	22	200	2.5	3	2.2	2.5
FXL0630-330-M	33	310	2.1	2.5	1.8	2
FXL0630-470-M	47	385	1.8	2	1.3	1.5

FXL0640-XXX series

Part No.	Inductance	DC Resistance	Saturation Current	Saturation Current	Heating Rating Current	Heating Rating Current
	L0 (µH)	DCR (mΩ)	Isat (A)	Isat (A)	Irms (A)	Irms (A)
	±20 %, 100 kHz, 1V	MAX.	MAX	TYP.	MAX	TYP.
FXL0640-R15-M	0.15	0.66±7%	45	50	36	40
FXL0640-R22-M	0.22	0.98±7%	28	35	32	35
FXL0640-R68-M	0.68	4.8	17	19	16	17
FXL0640-1R0-M	1.0	6.6	15	16	12.5	13.5
FXL0640-1R5-M	1.5	10	12	12.5	11	12.4
FXL0640-2R2-M	2.2	14	10	11	8.5	10
FXL0640-3R3-M	3.3	20	8.7	9.5	7.8	8.5
FXL0640-4R7-M	4.7	30	8	9	6	6.5
FXL0640-6R8-M	6.8	45	6	6.5	5	5.5
FXL0640-8R2-M	8.2	55	5.0	6	4.2	5.2
FXL0640-100-M	10	65	5	6	4	4.8
FXL0640-150-M	15	95	4	4.5	3.2	3.7
FXL0640-220-M	22	125	3.5	4	3	3.3
FXL0640-330-M	33	240	2.5	3	2	2.2
FXL0640-470-M	47	320	2	2.5	1.6	1.8

FXL0650-XXX series

Part No.	Inductance	DC Resistance	Saturation Current	Saturation Current	Heating Rating Current	Heating Rating Current
	L0 (µH)	DCR (mΩ)	Isat (A)	Isat (A)	Irms (A)	Irms (A)
	±20 %, 100 kHz, 1V	MAX.	MAX	TYP.	MAX	TYP.
FXL0650-R47M	0.47	3.9	16.8	21	17.0	20
FXL0650-R68M	0.68	4.5	14.4	18	14.5	16.5
FXL0650-1R0M	1.0	6.6	12.8	16	10	12
FXL0650-1R5M	1.5	10	10.4	13	8.2	9.5
FXL0650-2R2M	2.2	12.5	8.8	11	8.0	9
FXL0650-3R3M	3.3	22	8.0	10	7.6	8.5
FXL0650-4R7M	4.7	29	6.4	8	5	6
FXL0650-6R8M	6.8	41	5.04	6.3	4	5.8
FXL0650-8R2M	8.2	48	4.4	5.5	4.8	5.5
FXL0650-100M	10	60	4.24	5.3	3.8	4.5
FXL0650-150M	15	90	3.2	4	2.6	3.1
FXL0650-220M	22	140	2.8	3.5	2	2.6
FXL0650-330M	33	190	2.4	3.0	1.8	2.3
FXL0650-470M	47	230	2.08	2.6	1.5	2

FXL0840-XXX series

Part No.	Inductance	DC Resistance	Saturation Current	Saturation Current	Heating Rating Current	Heating Rating Current
	L0 (µH)	DCR (mΩ)	Isat (A)	Isat (A)	Irms (A)	Irms (A)
	±20 %, 100 kHz, 1V	MAX.	MAX	TYP.	MAX	TYP.
FXL0840-R22-M	0.22	1.8	55	60	30	36
FXL0840-R33-M	0.33	2.4	40	45	25	30
FXL0840-R47-M	0.47	2.8	36	42	25	28
FXL0840-R56-M	0.56	3.2	23	26	22	24
FXL0840-R68-M	0.68	3.8	22	24	21	23
FXL0840-R82-M	0.82	4.4	19	21	19	21
FXL0840-1R0-M	1.0	4.62	17	19	17	19
FXL0840-1R5-M	1.5	7.6	15	17	15	17
FXL0840-1R8-M	1.8	11	13.5	15	12.5	15
FXL0840-2R2-M	2.2	11.4	12	14	12	14
FXL0840-3R3-M	3.3	15	11	12.5	10	12
FXL0840-4R7-M	4.7	26.5	10.5	11.5	8.5	9.5

FXL0840-5R6-M	5.6	30	10	11	8.0	9
FXL0840-6R8-M	6.8	36.8	8.0	9	7.0	8
FXL0840-8R2-M	8.2	46	7.7	8.7	6.0	7
FXL0840-100-M	10.0	59	7.0	8	5.5	6.5
FXL0840-150-M	15.0	71	4.9	5.5	4.8	5.4
FXL0840-220-M	22.0	113	4.5	5	4.2	4.8
FXL0840-330-M	33.0	156	3.3	3.5	3.0	3.5
FXL0840-470-M	47.0	225	2.9	3.1	2.5	2.9

FXL1030-XXX series

Part No.	Inductance	DC Resistance	Saturation Current	Saturation Current	Heating Rating Current	Heating Rating Current
	L0 (µH)	DCR (mΩ)	Isat (A)	Isat (A)	Irms (A)	Irms (A)
	±20 %, 100 kHz, 1V	MAX.	MAX	TYP.	MAX	TYP.
FXL1030-R22-M	0.22	1.2	44.24	50	29.2	33
FXL1030-R33-M	0.33	1.6	28.3	32	20.35	23
FXL1030-R36-M	0.36	1.6	24.8	28	20.35	23
FXL1030-R47-M	0.47	2.5	23.0	26	19.47	22
FXL1030-R82-M	0.82	3.7	20.35	23	15.93	18
FXL1030-1R0-M	1.0	6	18.58	21	13.27	15
FXL1030-2R2-M	2.2	9	12.38	14	9.73	11
FXL1030-3R3-M	3.3	16	10.61	12	7.96	9
FXL1030-4R7-M	4.7	24	8.84	10	6.19	7
FXL1030-8R2-M	8.2	45	6.2	7	4.42	5
FXL1030-330-M	33	160	3.53	4	2.3	2.6

FXL1040-XXX series

Part No.	Inductance	DC Resistance	Saturation Current	Saturation Current	Heating Rating Current	Heating Rating Current
	L0 (µH)	DCR (mΩ)	Isat (A)	Isat (A)	Irms (A)	Irms (A)
	±20 %, 100 kHz, 1V	MAX.	MAX	TYP.	MAX	TYP.
FXL1040-R15-M	0.15	0.65	60	75	40	45
FXL1040-R22-M	0.22	1	48	60	30	35
FXL1040-R30-M	0.30	1.1	36	50	30	35

FXL1040-R36-M	0.36	1.2	36	50	25	30
FXL1040-R47-M	0.47	1.7	32	40	25	30
FXL1040-R56-M	0.56	1.8	26.4	33	20	25
FXL1040-R68-M	0.68	2.4	24	30	19	23
FXL1040-R80-M	0.80	2.7	23.2	29	19	23
FXL1040-1R0-M	1.0	3.3	22.4	28	16	19
FXL1040-1R5-M	1.5	4.2	19.2	26	14	16
FXL1040-2R2-M	2.2	7	13.2	18	10	12
FXL1040-3R3-M	3.3	11.8	12.8	16	9.5	11
FXL1040-4R7-M	4.7	20	10.4	15	7.5	9
FXL1040-5R6-M	5.6	22	9.6	12	6.8	8.5
FXL1040-6R8-M	6.8	25	9.6	12	7	8.5
FXL1040-8R2-M	8.2	27	7.2	9	6.8	8
FXL1040-100-M	10	30	6.8	8.5	6.9	7.8
FXL1040-150-M	15	45	5.6	7	5.6	6.5
FXL1040-220-M	22	66	4.4	5.5	4.2	5
FXL1040-330-M	33	92	3.84	5	3.8	4.4
FXL1040-470-M	47	145	3.1	3.5	2.8	3.3
FXL1040-560-M	56	185	2.5	3.2	2.2	2.8
FXL1040-680-M	68	195	2.4	3	2	2.5
FXL1040-820-M	82	285	2.3	2.8	2.1	2.3
FXL1040-101-M	100	340	2.1	2.3	1.8	2

FXL1050-XXX series

Part No.	Inductance	DC Resistance	Saturation Current	Saturation Current	Heating Rating Current	Heating Rating Current
	L0 (µH)	DCR (mΩ)	Isat (A)	Isat (A)	Irms (A)	Irms (A)
	±20 %, 100 kHz, 1V	MAX.	MAX	TYP.	MAX	TYP.
FXL1050-R22-M	0.22	0.8	57.5	65	32.5	37
FXL1050-1R0-M	1.0	3	28	30	20.3	23
FXL1050-1R5-M	1.5	3.8	22	25	18.5	21
FXL1050-2R2-M	2.2	6	16.8	19	13.2	15
FXL1050-3R3-M	3.3	10	14	16	11.5	13
FXL1050-4R7-M	4.7	14	13.2	15	9.7	11
FXL1050-5R6-M	5.6	17	12.3	14	8.5	9.5

FXL1050-6R8-M	6.8	18.5	12.3	14	8.0	9
FXL1050-100-M	10	28	8.8	10	7.0	8
FXL1050-150-M	15	42	6.5	7.5	5.7	6.5
FXL1050-220-M	22	50	5.3	6	5.0	5.5
FXL1050-330-M	33	86	4.6	5.2	4.2	4.8
FXL1050-470-M	47	127	4.0	4.5	3.2	3.7
FXL1050-680-M	68	180	2.8	3.5	2.4	2.7
FXL1050-101-M	100	290	2.5	2.8	1.8	2.1

FXL1340-XXX series

Part No.	Inductance	DC Resistance	Saturation Current	Saturation Current	Heating Rating Current	Heating Rating Current
	L0 (µH)	DCR (mΩ)	Isat (A)	Isat (A)	Irms (A)	Irms (A)
	±20 %, 100 kHz, 1V	MAX.	MAX	TYP.	MAX	TYP.
FXL1340-R22-M	0.22	0.9	40	50	38	42
FXL1340-R47-M	0.47	2	38.4	48	29	33
FXL1340-R68-M	0.68	3.5	37.6	47	24	28
FXL1340-R82-M	0.82	4.5	32	40	24	28
FXL1340-1R0-M	1.0	7.5	28	35	20	24
FXL1340-1R5-M	1.5	9.5	24.4	30.5	17	20
FXL1340-2R2-M	2.2	11.5	20.8	26	15	18
FXL1340-3R3-M	3.3	13	16.8	21	13	15
FXL1340-4R7-M	4.7	14.5	14.4	18	11	13
FXL1340-6R8-M	6.8	20	11.2	14	8	9
FXL1340-100-M	10	25	8	10	7	8
FXL1340-150-M	15	39	6	7.5	5.8	6.5
FXL1340-220-M	22	51	4.8	6	3.8	4.5

FXL1350-XXX series

Part No.	Inductance	DC Resistance	Saturation Current	Saturation Current	Heating Rating Current	Heating Rating Current
	L0 (µH)	DCR (mΩ)	Isat (A)	Isat (A)	Irms (A)	Irms (A)
	±20 %, 100 kHz, 1V	MAX.	MAX	TYP.	MAX	TYP.
FXL1350-R22-M	0.22	0.7	60	75	45	50
FXL1350-R36-M	0.36	0.85	40	50	37	42
FXL1350-R50-M	0.50	1.15	38.4	48	33	38
FXL1350-R68-M	0.68	1.55	36.8	46	29	33
FXL1350-R82-M	0.82	1.67	31.2	39	26	30
FXL1350-1R0-M	1.0	2.2	28	35	22	26
FXL1350-1R5-M	1.5	3.2	26.4	33	19	23
FXL1350-2R2-M	2.2	5	19.2	24	13	15
FXL1350-3R3-M	3.3	7	17.6	22	12	14
FXL1350-4R7-M	4.7	9	16	21	11	13
FXL1350-6R8-M	6.8	18	12.8	16	10	12
FXL1350-8R2-M	8.2	20	11	13	8.2	9.5
FXL1350-100-M	10	22	9.6	12	8	9
FXL1350-150-M	15	30	8	10	7	8
FXL1350-220-M	22	58	5.2	6.5	3.8	4.5
FXL1350-330-M	33	84	4.8	6	2.8	3.5
FXL1350-470-M	47	130	4.0	5	2.6	3

FXL1360-XXX series

Part No.	Inductance	DC Resistance	Saturation Current	Saturation Current	Heating Rating Current	Heating Rating Current
	L0 (µH)	DCR (mΩ)	Isat (A)	Isat (A)	Irms (A)	Irms (A)
	±20 %, 100 kHz, 1V	MAX.	MAX	TYP.	MAX	TYP.
FXL1360-1R0-M	1.0	2.3	28	31	24	28
FXL1360-2R2-M	2.2	4.2	24	28	18	22
FXL1360-4R7-M	4.7	9	19.2	24	12	15
FXL1360-5R6-M	5.6	11	18	22.5	11	13
FXL1360-6R8-M	6.8	13.5	15.2	19	10	12

FXL1360-8R2-M	8.2	16	10.8	13.5	9	11
FXL1360-100-M	10	20.7	11.1	12.5	8.5	10
FXL1360-120-M	12	23	8	10	5.8	7
FXL1360-150-M	15	29	7.2	9	4.9	6
FXL1360-180-M	18	35	6.4	8	4.3	5
FXL1360-220-M	22	39.5	6	7.5	4.15	5
FXL1360-270-M	27	56	5.2	6.5	3.3	4
FXL1360-330-M	33	75	4.8	6	3.15	4
FXL1360-470-M	47	90	4.4	5.5	2.9	3.5
FXL1360-680-M	68	140	3.6	4.5	2.5	3
FXL1360-101-M	100	200	2.8	3.5	2.1	2.5
FXL1360-121-M	120	235	2.56	3.2	1.7	2
FXL1360-151-M	150	350	2.16	2.7	1.2	1.5

FXL1365-XXX series

Part No.	Inductance	DC Resistance	Saturation Current	Saturation Current	Heating Rating Current	Heating Rating Current
	L0 (µH)	DCR (mΩ)	Isat (A)	Isat (A)	Irms (A)	Irms (A)
	±20 %, 100 kHz, 1V	MAX.	MAX	TYP.	MAX	TYP.
FXL1365-2R2-M	2.2	4.2	22.4	28	16.8	21
FXL1365-4R7-M	4.7	8.5	20	24	13	16
FXL1365-5R6-M	5.6	10.5	18	22.5	12	14
FXL1365-6R8-M	6.8	12	17	19	11	13
FXL1365-8R2-M	8.2	14	14	16	9	12
FXL1365-100-M	10	16.5	13.5	13.5 15	10	11
FXL1365-150-M	15	26	8	11	6.5	9.5
FXL1365-220-M	22	36	7	9	6	8
FXL1365-330-M	33	65	6	8	4.8	6.5
FXL1365-470-M	47	70	5	6.8	4.5	5.5
FXL1365-680-M	68	120	4.8	5.2	4.0	4.8
FXL1365-820-M	82	135	4	4.5	3.5	4
FXL1365-101-M	100	170	3.2	4	3	3.5

FXL1770-XXX series

Part No.	Inductance	DC Resistance	Saturation Current	Saturation Current	Heating Rating Current	Heating Rating Current
	L0 (µH)	DCR (mΩ)	Isat (A)	Isat (A)	Irms (A)	Irms (A)
	±20 %, 100 kHz, 1V	MAX.	MAX	TYP.	MAX	TYP.
FXL1770-2R2-M	2.2	2.5	30	34	25.5	29
FXL1770-3R3-M	3.3	3.95	26	30	21	24
FXL1770-4R7-M	4.7	4.75	21	24	18.5	21
FXL1770-6R8-M	6.8	7.5	19.5	22	15	17
FXL1770-8R2-M	8.2	8.7	17.5	20	11.5	13
FXL1770-100-M	10	9.9	16.5	19	10.5	12
FXL1770-150-M	15	17	12.5	14.5	9.5	11
FXL1770-220-M	22	23	10	11.5	7.5	8.5
FXL1770-330-M	33	37	8.5	10	7	8
FXL1770-470-M	47	47	6.5	7.5	5.3	6
FXL1770-680-M	68	85	5.5	6.5	4.5	5.2
FXL1770-101-M	100	130	4.4	5	3.2	3.7

FXL2213-XXX series

Part No.	Inductance	DC Resistance	Saturation Current	Saturation Current	Heating Rating Current	Heating Rating Current
	L0 (µH)	DCR (mΩ)	Isat (A)	Isat (A)	Irms (A)	Irms (A)
	±20 %, 100 kHz, 1V	MAX.	MAX	TYP.	MAX	TYP.
FXL2213-1R0-M	1.0	0.95	54	60	65	70
FXL2213-1R5-M	1.5	1.15	48	52	57	62
FXL2213-2R2-M	2.2	1.25	43	48	52	58
FXL2213-3R3-M	3.3	1.75	37	41	47	49
FXL2213-4R7-M	4.7	2.2	34	38	44	47
FXL2213-6R8-M	6.8	3.1	32	36	36	40
FXL2213-100-M	10	4.15	20	28	30	33
FXL2213-150-M	15	6.12	18	23	23	26
FXL2213-220-M	22	11	14	15	18	22
FXL2213-330-M	33	15.4	10.5	12	16	19
FXL2213-470-M	47	20.8	10	12	14	17
FXL2213-680-M	68	29.5	9	12	12	14

FXL2213-820-M	82	34.2	7.7	9	10	12
FXL2213-101-M	100	40	7.5	9	9.5	11

Notes

- 1. All test data is referenced to 25 °C ambient
- 2. Operating temperature range 55 °C to + 125 °C
- 3. Isat (A) MAX: DC current at which the inductance drops approximately 30% from its value without current.
- 4. Irms (typ):DC current that causes the temperature rise(AT = 40 C) form 25°C ambient
- 5. Irms (Max):DC current that causes the temperature rise(AT = 20° C)form 25° C ambient
- 6. The part temperature (ambient + temp rise) should not exceed 125°C under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions, all affect the part temperature. Part temperature should be verified in the end application.
- 7. For FXL series inductors, absolute maximum voltage: DC 30V.

Mechanical Relia	bility					
Item	Specification and Requirement	Test Method				
Solderability	 No case deformation or change in apperarance New solder coverage More than 95% 	1.Preheat: $155^{\circ}C\pm5^{\circ}C$, $60S\pm2S$ 2.Tin: lead-free. 3.Temperature:240 $^{\circ}C\pm5^{\circ}C$, flux $3.0S\pm0.5S$.				
Mechanical shock	 1. No case deformation or change in apperarance 2. △L/Lo ≤ ±10% 	 Acceleration: 100G Pulse time: 6ms 3 times in each positive and negative direction of 3 mutual perpendicular directions 				
Mechanical vibration	 1. No case deformation or change in apperarance 2. △L/Lo≦±10% 	 Reflow: 2times Frequency: 10HZ~55HZ~10HZ, 20 Min/Cycles Amplitude: 1.52 mm Directions: X,Y,Z Time: 12 cycle / direction 				
Endurance Relia	bility					
Item	Specification and Requirement	Test Method				
Thermal Shock	Inductance change: Within \pm 10% Without distinct damage in appearance	 First -55°C for 30 minutes, last 125°C for 30 minutes as 1 cycle. Go through 1000 cycles. Max transfer time is 3 minutes. Measured at room temperature after placing for 24±2 hours 				
Humidity Resistance	Inductance change: Within \pm 10% Without distinct damage in appearance	1.Reflow 2 times, 2.85 $^\circ\!$				
Low temperature storage	Inductance change: Within \pm 10% Without distinct damage in appearance	1. Temperature: -55 \pm 2°C 2. Time: 1000 hours 3. Measured at room temperature after placing for 24 \pm 2 hours				
High temperature storage	Inductance change: Within \pm 10% Without distinct damage in appearance	 Temperature: +125 ± 2°C Time: 1000 hours Measured at room temperature after placing for 24±2 hours 				

Recommended Soldering Technologies

(1)Re-flowing Profile

Preheat condition: 150 ~200 °C/60~120sec.

Allowed time above 217°C: 60~90sec.

Max temp: 260°C

Max time at max temp: 10 sec.

Solder paste: Sn/3.0Ag/0.5Cu

Allowed Reflow time: 2x max

(2)Iron Soldering Profile

Iron soldering power: Max. 30W

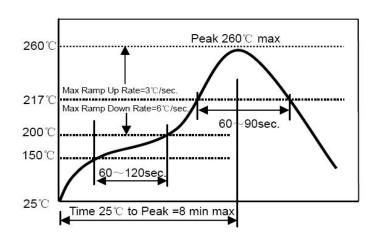
Pre-heating: 150°C/60sec.

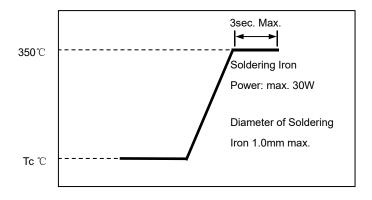
Soldering Tip temperature: 350 ℃ Max.

Soldering time: 3sec. Max.

Solder paste: Sn/3.0Ag/0.5Cu

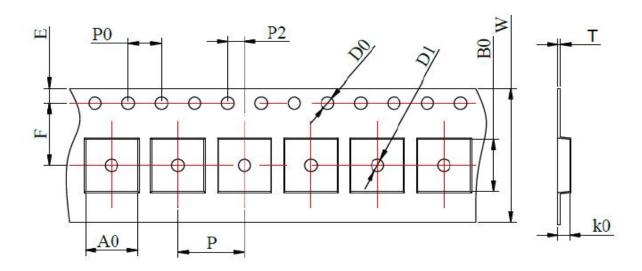
Max.1 times for iron soldering





Packaging Information

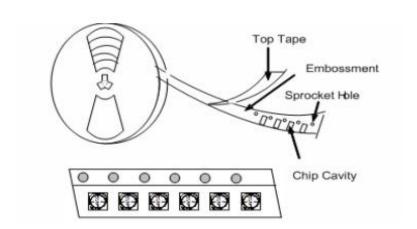
(1) Tape Packaging Dimensions (Unit: mm)

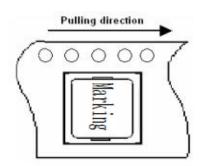


Turno					Тар	e dimer	nsions (r	nm)				
Туре	W	Р	P0	P2	D0	D1	Т	A0	В0	K0	Е	F
FXL0412	12	8	4	2	1.5	1.5	0.35	4.5	4.85	1.5	1.75	5.5
FALU412	±0.3	±0.1	±0.1	±0.1	±0.1	±0.1	±0.05	±0.1	±0.1	±0.1	±0.1	±0.1
FXL0420	12	8	4	2	1.5	1.5	0.35	4.5	4.85	2.3	1.75	5.5
1 AL0420	±0.3	±0.1	±0.1	±0.1	±0.1	±0.1	±0.05	±0.1	±0.1	±0.1	±0.1	±0.1
FXL0518	12	8	4	2	1.5	1.5	0.35	5.5	5.9	2.0	1.75	5.5
1 XLOOTO	±0.3	±0.1	±0.1	±0.1	±0.1	±0.1	±0.05	±0.1	±0.1	±0.01	±0.1	±0.1
FXL0530	12	8	4	2	1.5	1.5	0.35	5.5	5.9	3.3	1.75	5.5
1 XE0330	±0.3	±0.1	±0.1	±0.1	±0.1	±0.1	±0.05	±0.1	±0.1	±0.1	±0.1	±0.1
FXL0615	16	12	4	2	1.5	1.5	0.35	6.9	7.5	1.7	1.75	7.5
1 // 20010	±0.3	±0.1	±0.1	±0.1	±0.1	±0.1	±0.05	±0.1	±0.1	±0.1	±0.1	±0.1
FXL0618	16	12	4	2	1.5	1.5	0.35	6.9	7.5	2.1	1.75	7.5
1 // 20010	±0.3	±0.1	±0.1	±0.1	±0.1	±0.1	±0.05	±0.1	±0.1	±0.1	±0.1	±0.1
FXL0624	16	12	4	2	1.5	1.5	0.35	6.9	7.5	2.7	1.75	7.5
1 AL0024	±0.3	±0.1	±0.1	±0.1	±0.1	±0.1	±0.05	±0.1	±0.1	±0.1	±0.1	±0.1
FXL0630	16	12	4	2	1.5	1.5	0.35	7.0	7.7	3.3	1.75	7.5
1 7/20000	±0.3	±0.1	±0.1	±0.1	±0.1	±0.1	±0.05	±0.1	±0.1	±0.1	±0.1	±0.1
FXL0640	16	12	4	2	1.5	1.5	0.4	6.9	7.5	4.3	1.75	7.5
1 7/20040	±0.3	±0.1	±0.1	±0.1	±0.1	±0.1	±0.05	±0.1	±0.1	±0.1	±0.1	±0.1
FXL0650	16	12	4	2	1.5	1.5	0.4	6.9	7.5	5.4	1.75	7.5
1 AL0030	±0.3	±0.1	±0.1	±0.1	±0.1	±0.1	±0.05	±0.1	±0.1	±0.1	±0.1	±0.1
FXL0840	24	16	4	2	1.55	1.55	0.35	8.9	10.1	4.4	1.75	11.5
1 7/20040	±0.3	±0.1	±0.1	±0.1	±0.1	±0.1	±0.05	±0.1	±0.1	±0.1	±0.1	±0.1
FXL1030	24	16	4	2	1.5	1.5	0.35	10.4	11.6	3.3	1.75	11.5
1 XL 1030	±0.3	±0.1	±0.1	±0.05	±0.1	±0.1	±0.05	±0.1	±0.1	±0.1	±0.1	±0.1
FXL1040	24	16	4	2	1.5	1.5	0.35	10.4	11.6	4.3	1.75	11.5
1 AL 1040	±0.3	±0.1	±0.1	±0.05	±0.1	±0.1	±0.05	±0.1	±0.1	±0.1	±0.1	±0.1
FXL1050	24	16	4	2	1.5	1.5	0.4	10.4	11.6	5.4	1.75	11.5
I AL 1000	±0.3	±0.1	±0.1	±0.05	±0.1	±0.1	±0.05	±0.1	±0.1	±0.1	±0.1	±0.1
FXL1340	24	16	4.0	2.0	1.5	1.5	0.5	13.1	14	4.3	1.75	11.5
I ALIOTO	±0.3	±0.1	±0.1	±0.1	±0.1	±0.1	±0.05	±0.1	±0.1	±0.1	±0.1	±0.1

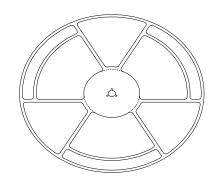
EVI 1250	24	16	4.0	2.0	1.5	1.5	0.5	13.1	14	5.4	1.75	11.5
FXL1350	±0.3	±0.1	±0.1	±0.1	±0.1	±0.1	±0.05	± 0.1	±0.1	±0.1	±0.1	±0.1
FXL1360	24	16	4.0	2.0	1.5	1.5	0.5	13.1	14	6.3	1.75	11.5
FALISOU	±0.3	±0.1	±0.1	± 0.1	±0.1	±0.1	± 0.05	± 0.1	± 0.1	± 0.1	±0.1	±0.1
FXL1365	24	16	4.0	2.0	1.5	1.5	0.5	13.1	14	6.8	1.75	11.5
FALISOS	±0.3	±0.1	±0.1	±0.1	±0.1	±0.1	±0.05	± 0.1	±0.1	±0.1	±0.1	±0.1
FXL1770	32	24	4.0	2.0	1.5	0.5	17.5	18.1	7.3	1.75	14.2	14.2
FALI770	±0.3	±0.1	±0.1	±0.1	±0.1	± 0.05	±0.1	± 0.1	±0.1	±0.1	±0.1	±0.1
FXL2213	44	32	4.0	2.0	1.5	0.5	23	24.4	13.5	1.75	20.2	44
FALZZIS	±0.3	±0.1	±0.1	±0.1	±0.1	± 0.05	±0.1	± 0.1	± 0.1	± 0.1	±0.1	± 0.3

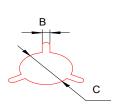
Taping Drawings (UNIT:mm)

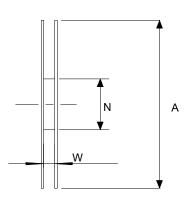




(2) Reel Dimensions (Unit: mm)







Туре	Α	W	N	В	С
FXL0412	330+2.0	12.8±0.2	97±0.5	2.2+0.5	13.0±0.2
FXL0420	330+2.0	12.8±0.2	97±0.5	2.2+0.5	13.0±0.2
FXL0518	330+2.0	12.8+0.2	97+0.5	2.2+0.5	13.2±0.2
FXL0530	330+2.0	12.8+0.2	97+0.5	2.2+0.5	13.2±0.2
FXL0615	330+2.0	16.8+0.2	97+0.5	2.2+0.5	13.2±0.2
FXL0618	330+2.0	16.8+0.2	97+0.5	2.2+0.5	13.2±0.2
FXL0624	330+2.0	16.8+0.2	97+0.5	2.2+0.5	13.2±0.2
FXL0630	330+2.0	16.8+0.2	97+0.5	2.2+0.5	13.2±0.2
FXL0640	330+2.0	16.8+0.2	97+0.5	2.2+0.5	13.2±0.2
FXL0650	330+2.0	16.8+0.2	97+0.5	2.2+0.5	13.2±0.2
FXL0840	330+2.0	24±0.5	97±0.5	2.2+0.5	13.0±0.2
FXL1030	330+2.0	24±0.5	97±0.5	2.2+0.5	13.0±0.2
FXL1040	330+2.0	24±0.5	97±0.5	2.2+0.5	13.0±0.2
FXL1050	330+2.0	24±0.5	97±0.5	2.2+0.5	13.0±0.2
FXL1340	330+2.0	24±0.5	97±0.5	2.2+0.5	13.0±0.2
FXL1350	330+2.0	24±0.5	97±0.5	2.2+0.5	13.0±0.2
FXL1360	330+2.0	24±0.5	97±0.5	2.2+0.5	13.0±0.2
FXL1365	330+2.0	24±0.5	97±0.5	2.2+0.5	13.0±0.2

FXL1770	330±2.0	32.0±0.5	97±0.5	2.3±0.3	13.0±0.2
FXL2213	330±2.0	44.0±0.5	97±0.5	2.3±0.3	13.0±0.2

(3) Packaging Quantity

T. m. c	Standard Quantity				
Туре	Reel	Inner box	Carton box		
FXL0412	3000 pcs / reel	4Reel / box (12000 pcs)	3 Middle boxes, (36,000 pcs)		
FXL0420	3000 pcs / reel	4Reel / box (12000 pcs)	3 Middle boxes, (36,000 pcs)		
FXL0518	2000 pcs / reel	4Reel / box (8000 pcs)	3 Middle boxes, (24000 pcs)		
FXL0530	2000 pcs / reel	4Reel / box (8000 pcs)	3 Middle boxes, (24000 pcs)		
FXL0615	2000 pcs / reel	3Reel / box (6000 pcs)	3 Middle boxes, (18000 pcs)		
FXL0618	1500 pcs / reel	3Reel / box (4500 pcs)	3 Middle boxes, (13500 pcs)		
FXL0624	1500 pcs / reel	3Reel / box (4500 pcs)	3 Middle boxes, (13500 pcs)		
FXL0630	1500 pcs / reel	3Reel / box (4500 pcs)	3 Middle boxes, (13500 pcs)		
FXL0640	1000 pcs / reel	3Reel / box (3000 pcs)	3 Middle boxes, (9000 pcs)		
FXL0650	1000 pcs / reel	3Reel / box (3000 pcs)	3 Middle boxes, (9000 pcs)		
FXL0840	800 pcs / reel	2Reel / box (1600 pcs)	3 Middle boxes, (4800 pcs)		
FXL1030	800 pcs / reel	2Reel / box (1600 pcs)	3Middle boxes, (4800 pcs)		
FXL1040	500 pcs / reel	2Reel / box (1000 pcs)	3 Middle boxes, (3000 pcs)		
FXL1050	500 pcs / reel	2Reel / box (1000 pcs)	3 Middle boxes, (3000 pcs)		
FXL1340	500 pcs / reel	2Reel / box (1000 pcs)	3 Middle boxes, (3000 pcs)		
FXL1350	500 pcs / reel	2Reel / box (1000 pcs)	3 Middle boxes, (3000 pcs)		
FXL1360	500 pcs / reel	2Reel / box (1000 pcs)	3 Middle boxes, (3000 pcs)		

FXL1365	500 pcs / reel	2Reel / box (1000 pcs)	3 Middle boxes, (3000 pcs)
FXL1770	200 pcs / reel	2Reel / box (400 pcs)	3 Middle boxes, (12000 pcs)
FXL2213	80 pcs / reel	1Reel / box (80 pcs)	Middle boxes, (240 pcs)

深圳市长江微电科技有限公司

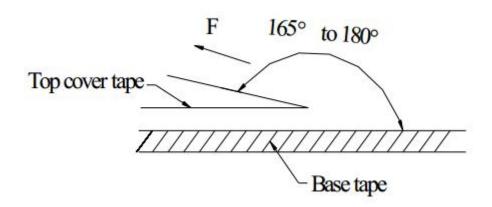
SZ CJIANG TECHNOLOGY CO.,LTD

标签

(4) Peel force of top cover tape

The peel speed shall be about 300mm/minute

The peel force of top cover tape shall be between 0.1 to 1.3 N



(5) Reel Label

Label on the reel

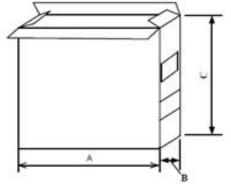
- Customer's part Number
- Lot Number
- Quantity
- · date code

Shipping Label

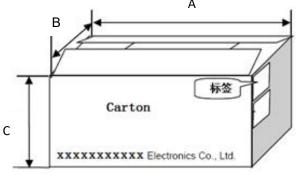
- Quantity
- · date code

(6) Inner Box





Packaging type	A(mm)	B (mm)	B (mm)
inner box	354	335	86



Packaging type	A (mm)	B (mm)	B (mm)
type	370	365	285