SUNLEI

FOR APPROVAL

樣 品 承 認 書

Halogen-Free

Pb

客 戶 名 稱
CUSTOMER

產 品 名 稱
PRODUCT **Trans-inductor Voltage Regulator**

產 品 型 號
PART NO. **SLVR120612-SERIES**

客 戶 型 號
PART NO.

承認印 APPROVED BY	發行單位 ISSUE BY
0	昕磊科技 承認書發行章 工程部 昕 磊 科 技 股 份 有 限 公 司

日 期
DATE **2024/09/30**

Office:
昕 磊 科 技 股 份 有 限 公 司 SUNLEI TECHNOLOGY CORP.
ADD:新北市中和区中山路三段110號9樓之8
9F.-8, No.110,Sec.3,Zhongshan Rd;Zhonghe City,Taipei County 235,Taiwan
TEL:886-2-8228-7672 FAX:886-2-8228-7673
E-MAIL:andy.h@sunlei.com.tw WEB:http://www.sunlei.com.tw

Factory:
東莞創頂電子有限公司 CHAINTK ELECTRONICS CORP.
ADD:中國廣東省東莞市虎門鎮樹田村樹安工業區
shuan industrial park, shutianVillage Humen Town Dongguan City Guangdong Province China
TEL:86-769-38892012/ FAX:86-769-38892038

RECORD OF REVISION

CUSTOMER:		PART NO.:	SLVR120612-SERIES
DESCRIPTION:	Trans-inductor Voltage Regulator	CUSTOMER P/N:	

REV	DESCRIPTION ITEMS BE CHANGED OVER, (FROM / T0)	DATE	MADE BY	CHECKED
A1	INITIAL	2024/09/30	Yan	Aiji li

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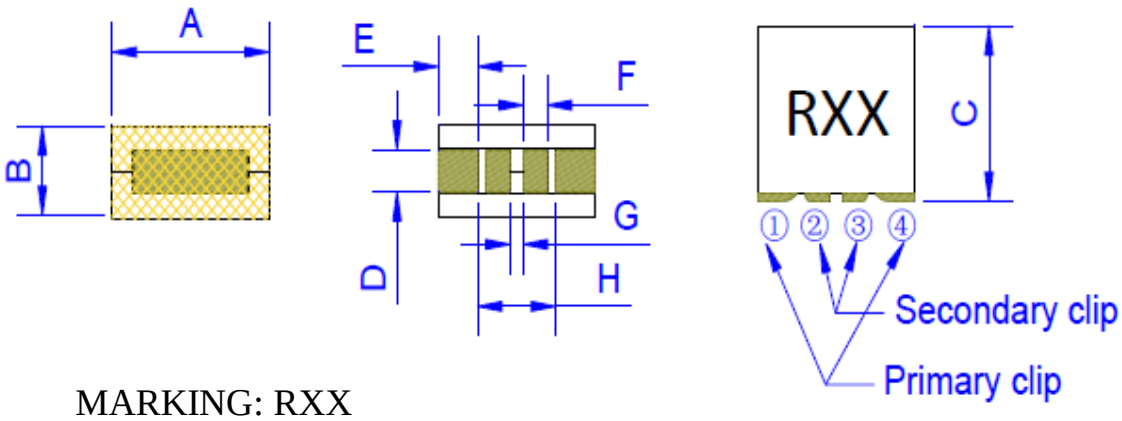
	Andy 2024/09/30	Aiji 2024/09/30	Yan 2024/09/30

SPECIFICATION FOR APPROVAL

CUSTOMER:		PART NO.:	SLVR120612-SERIES
DESCRIPTION:	Trans-inductor Voltage Regulator	CUSTOMER P/N:	

1.CONFIGURATION DIMENSIONS(UNIT:mm)

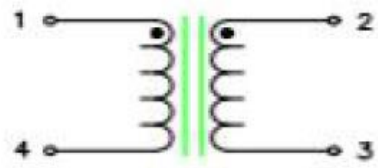
100% Lead Free and HF.

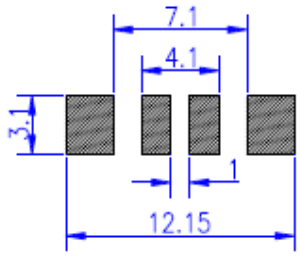


MARKING: RXX

A	12.0MAX
B	6.2MAX
C	12.0MAX
D	2.4±0.3
E	3.1±0.3
F	1.05±0.2
G	1.4REF
H	5.3REF

SCHEMATIC





RECOMMENDER P.C.B LAYOUT

2.ELECTRICAL CHARACTERISTICS

Part number	Initial Inductance (nH)	Tolerance (±%)	DCR(primary clip)mΩ	DCR(secondary clip) mΩ	1-Saturation Current@25℃ (Amps)(typ)	2-Saturation Current@100℃ (Amps)(typ)	Heating Current (Amps)(typ)
							primary
SLVR120612-R10L-R125/R45	100	15	0.125 ±10%	0.45MAX	125	105	70
SLVR120612-R105L-R125/R45	105	15	0.125 ±10%	0.45MAX	125	100	70
SLVR120612-R12L-R125/R45	120	15	0.125 ±10%	0.45MAX	100	90	70
SLVR120612-R15L-R125/R45	150	15	0.125 ±10%	0.45MAX	80	70	70
SLVR120612-R17L-R125/R45	170	15	0.125 ±10%	0.45MAX	70	55	70

Note 1 : All test data is referenced to 25℃ ambient.

Note 2 : Irms : DC current (A) that will cause an approximate △T of 40℃

Note 3 : Isat : DC current (A) that will cause Lo to drop approximately 20%

Note 4 : Testing at 100KHz /1.0Vrms

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SPECIFICATION FOR APPROVAL

Inductance (nH) vs DC Bias (Amps) # 100KHz/1.0V

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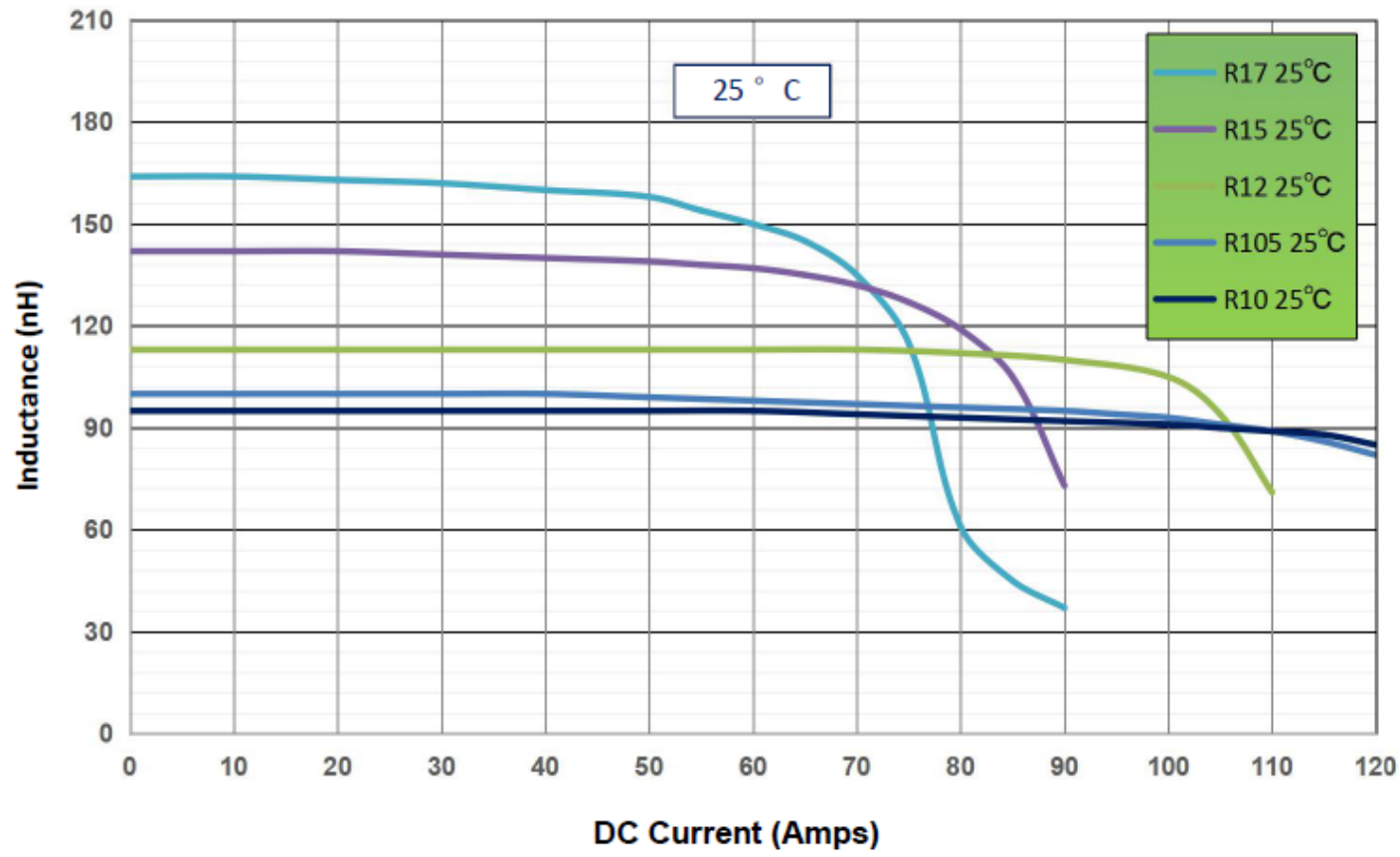

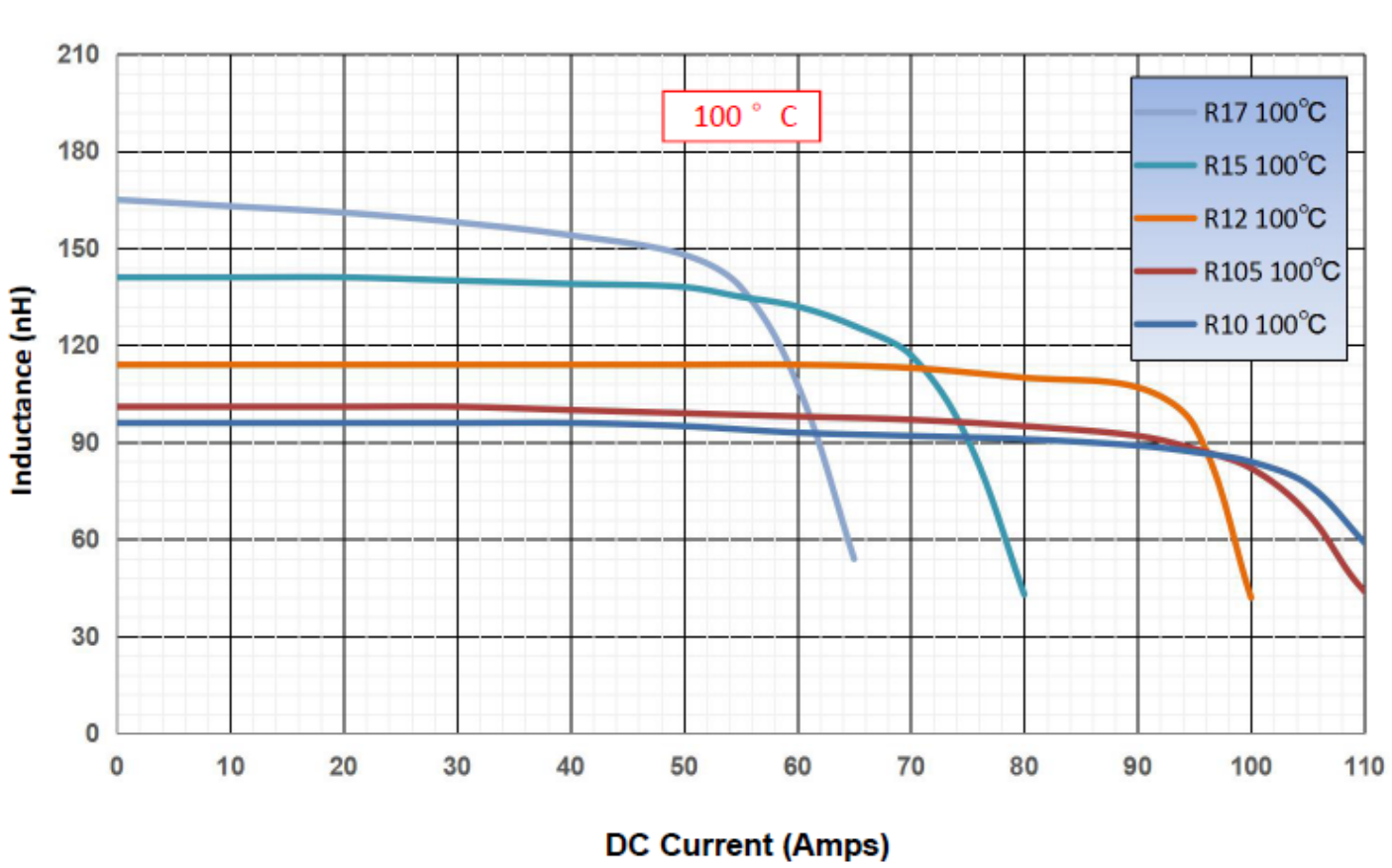

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Temperature rise ΔT (°C) VS DC Bias (Amps)

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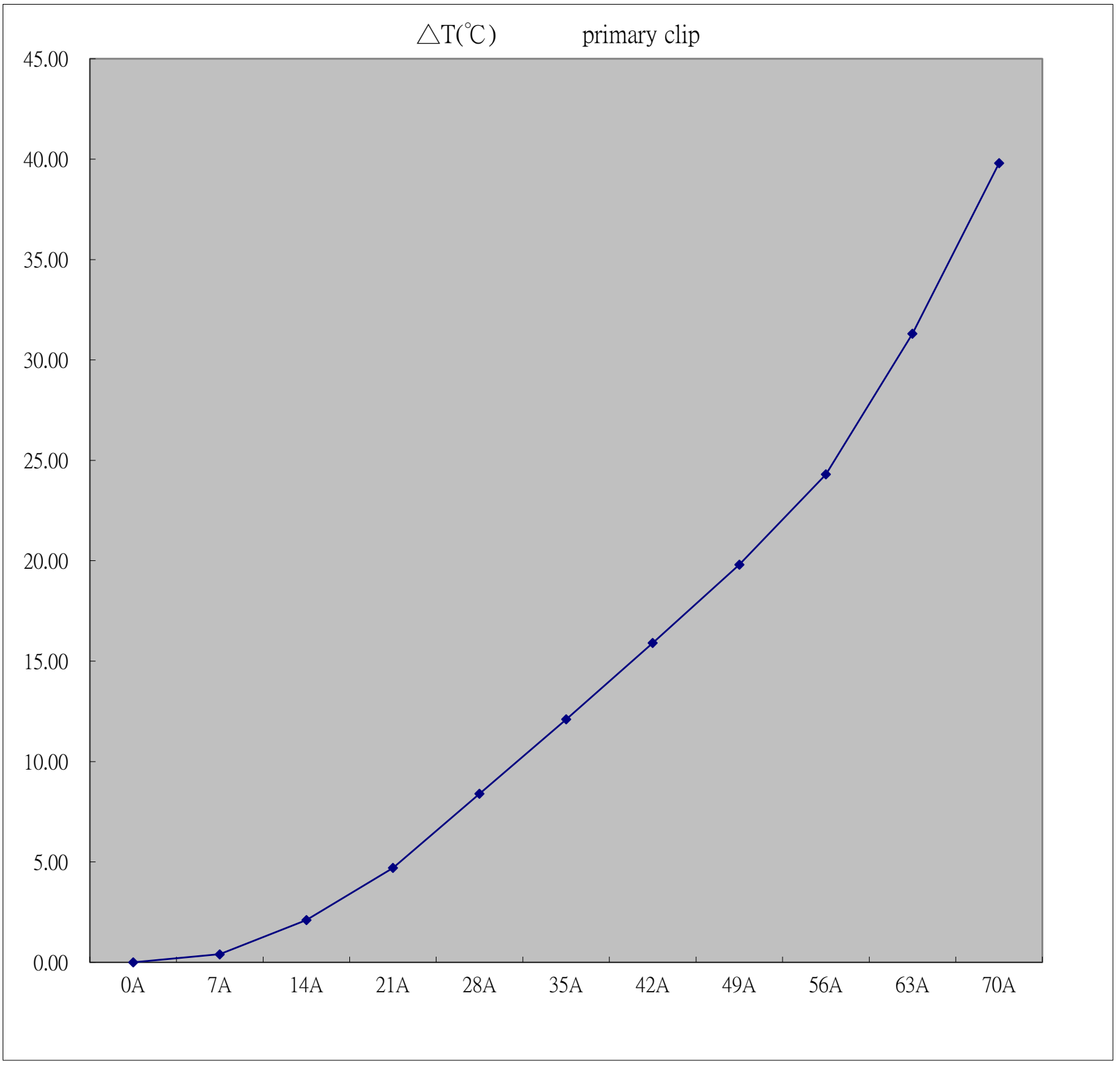

Adc	0A	7A	14A	21A	28A	35A	42A	49A	56A	63A	70A		
△T(℃) primary clip	0.00	0.40	2.10	4.70	8.40	12.10	15.90	19.80	24.30	31.30	39.80		

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PACKING

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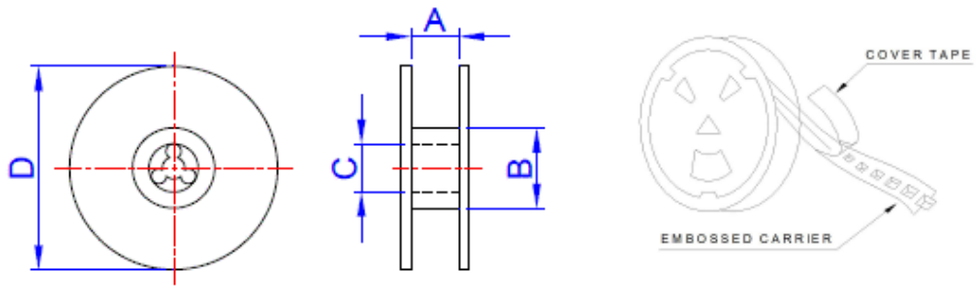
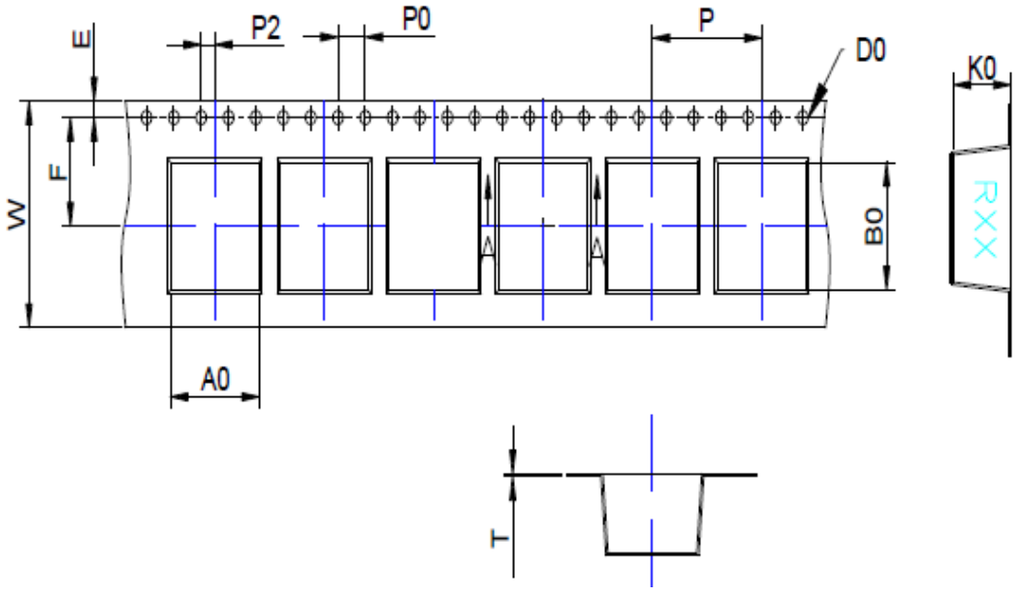
1.Configuration.



TYPE	A(mm)	B(mm)	C(mm)	D(mm)
13" x 24mm	24.0±0.5	100 ±2	13.5 ±0.5	330REF



TYPE	Ao(mm)	Bo(mm)	Ko(mm)	P(mm)	T(mm)	W(mm)
SLVR120612	6.2±0.1	12.2±0.1	12.2±0.1	16.0±0.1	0.5±0.05	24.0±0.3

SLVR120612	
REEL	300PCs

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RELIBILITY

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Recommended Soldering Conditions：

Figure 1. Re-flow Soldering

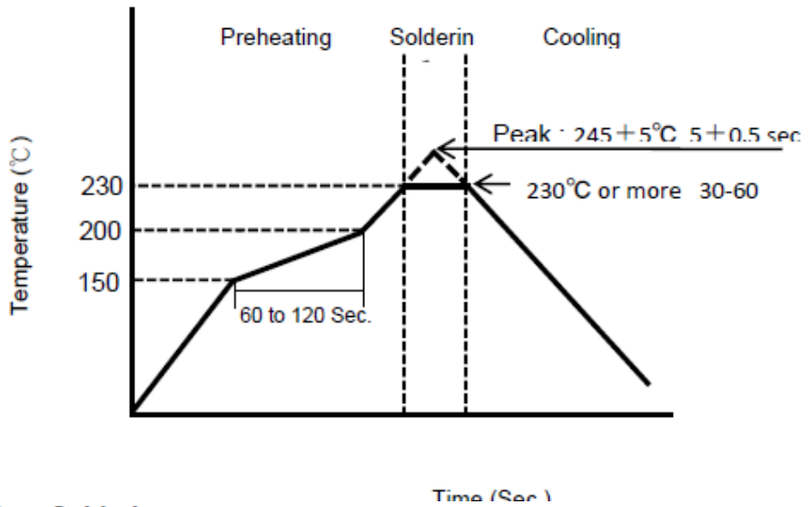


Figure 2. Wave Soldering

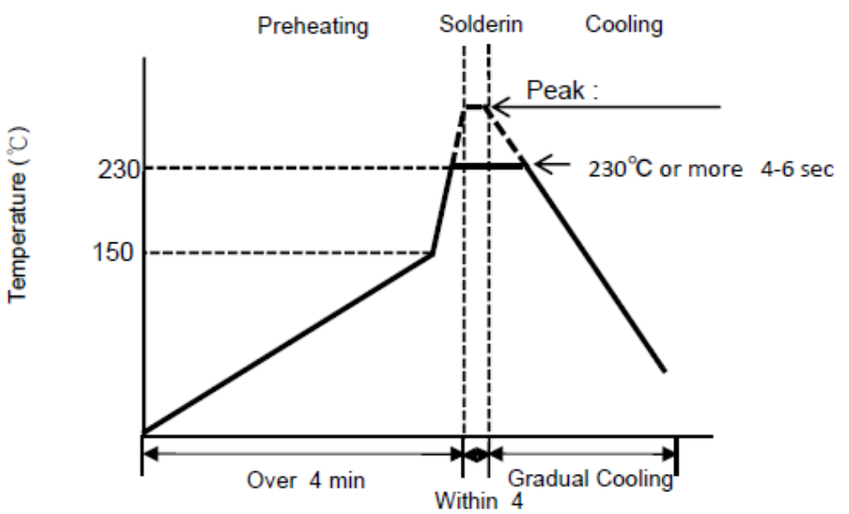
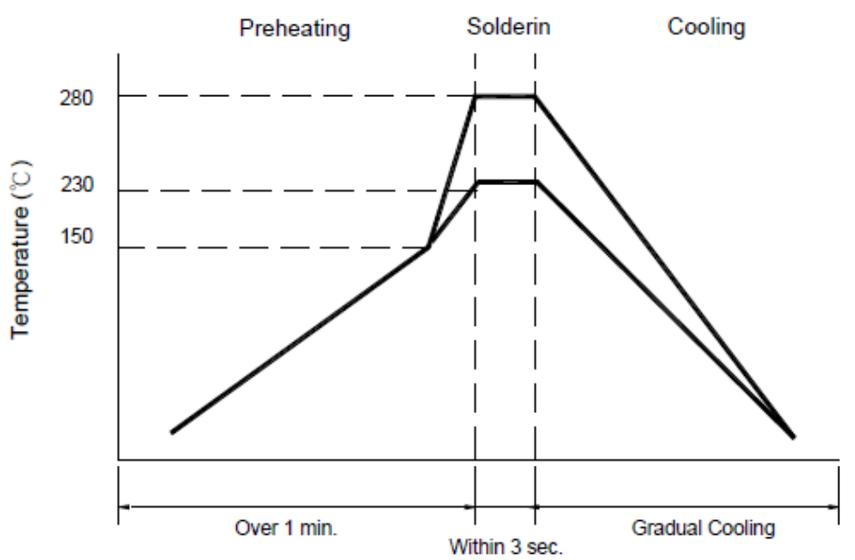


Figure 3. Hand Soldering



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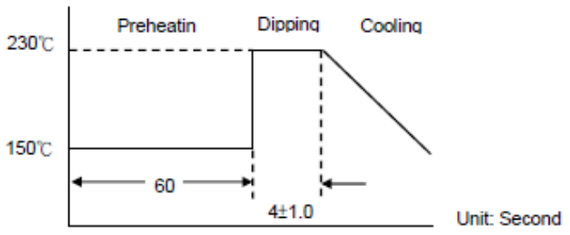
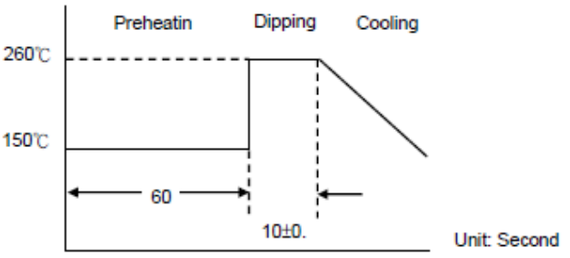
Reliability and Testing Conditions / Pin Type Power Inductors：

No.	Item	Specification	Conditions
1	Solderability	More than 90% of the terminal electrode should be covered with solder.	
2	Solder Heat Resistance	Inductance within ±20% of initial value. No disconnection or short circuit. The appearance shall not break.	
3	Heat resistance	Inductance within ±20% of initial value. No disconnection or short circuit. The appearance shall not break.	After 500 hours in 125±5℃ and 2 hour drying under normal condition.
4	Cold resistance	Inductance within ±20% of initial value. No disconnection or short circuit. The appearance shall not break.	After 500 hours in -40±5℃ and 2 hour drying under normal condition.
5	Thermal shock	Inductance within ±20% of initial value. No disconnection or short circuit. The appearance shall not break.	After 10 cycles of following condition. Step / Temperature (℃) / Times (min.) 1 / -40±5℃ / 30 2 / Room Temperature / Within 3 3 / 125±5℃ / 30 4 / Room Temperature / Within 3
6	Humidity Resistance	Inductance within ±20% of initial value. No disconnection or short circuit. The appearance shall not break.	After 500 hours in 40±2℃ and 90 to 95% humidity , and 2 hour drying under normal condition.
7	Vibration Test	Inductance within ±5% of initial value and appearance shall not break.	After vibration for 1hour, In each of three orientations at sweep vibration (10~55~10Hz) with 1.52mm P-P Amplitudes.

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