



SPECIFICATION FOR APPROVAL

CUSTOMER : JETWAY

VENDOR : MAGIC TECHNOLOGY CO.,LTD.

PRODUCTS : Shielded Molding - SMD

PART NO : SRPG1207-6R8M-AW

CUST NO :

DATE : 2019/9/18

SALES DEP. : [Orson](#)

E-MAIL : orson@magitect.com.tw

PURCHASER CONFIRMED		
APPROVAL NO.	APPROVAL BY	

MAGIC ENGINEER DEPT.		
APPROVAL BY	CHECK BY	DRAWN BY
TAN ZI YANG	WANG L I	ZHU NAN QIN

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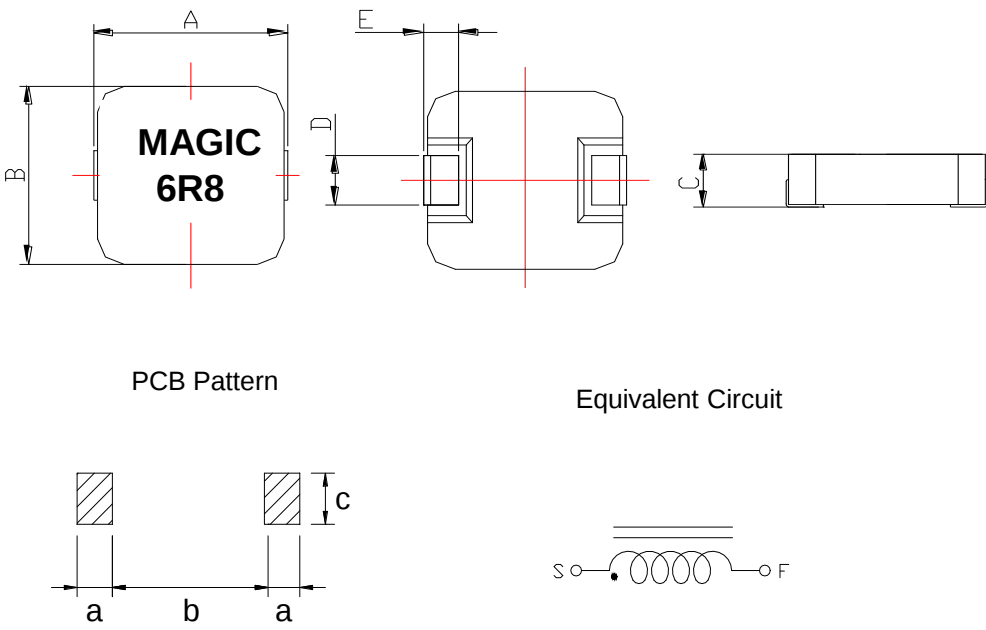
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QWRD10承認書B

SPECIFICATION FOR APPROVAL

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COMPLIANT

CUSTOMER : JETWAY DATE : 43726.72153
CUST P/NO : REV NO: A
MG PART : SRPG1207-6R8M-AW PAGE NO : 2 / 8
MG P/NO : MG NO :

1.MECHANICAL & DIMENSIONS		(UNIT: mm)
 PCB Pattern Equivalent Circuit a b a c	A	13.5±0.3
	B	12.6±0.3
	C	6.3±0.2
	D	3.6±0.5
	E	2.3±0.5
	a	2.9 ref
	b	7.9 ref
	c	5.0 ref
REMARK		
灰色coating		

2.ELECTRICAL REQUIREMENTS:

PARAMETER	SPECIFICATION	CONDITION	TEST INSTRUMENTS
L0	6.8± 20% uH	100KHz/0.25V	■CH-1062A LCR METER
DCR	14.0 Max mohm	@25 ± 5℃	■CH-16502BC IMPEDANCE METER
I-sat	16.5 (Typ) Amps	75% L0	■CH-3302 LCR METER + CH-1320 BIAS
I rms	11.5(Typ) Amps	ΔT ≤ 40℃	■DIGITAL THERMOMETER: DM6801A

3.TEMPERATURE RATING:

Operating	-40℃ ~ 125℃
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4.PRODUCT IDENTIFICATION:

SRPG 1207 - 6R8 M - AW

A B C D E

A: Series Name.

B: Dimensions and shape.

C: Inductance. (Exp. 6.8uH = 6R8)

D: Inductance Tolerance. (M±20% , K±10%)

E: Process code.

DRAWN BY :	CHECKED BY :	APPROVED BY :
ZHU NAN QIN	WANG LI	TAN ZI YANG

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CUSTOMER : JETWAY _____ DATE : 43726.72153 _____
 CUST P/NO : _____ REV NO: : A _____
 MG PART : SRPG1207-6R8M-AW _____ PAGE NO : 3 / 8 _____
 MG P/NO : _____ MG NO : _____

5.TESTING DATA:					
PARAMETER	L0	DCR	I-sat	I rms	
UNIT	uH	mohm	Amps	Amps	
SPECIFICATION	6.8± 20%	14.0 Max	16.5 (Typ)	11.5(Typ)	
CONDITION	100KHz/0.25V	@25 ± 5℃	75% L0	ΔT ≤ 40℃	
1	6.28	13.24	OK	OK	
2	6.40	13.24			
3	6.32	13.12			
4	6.34	13.12			
5	6.33	13.26			
6	6.42	13.21			
7	6.39	13.28			
8	6.33	13.25			
9	6.30	13.12			
10	6.34	13.25			
MEAN	6.35	13.21			
R	0.14	0.16			

6.AMBIENT CONDITION			
TEMPERATURE	25 ± 5℃	HUMIDITY	60 ± 10%

7.TEST DATA								
NO	A	B	C	D	E			
	13.5±0.3	12.6±0.3	6.3±0.2	3.6±0.5	2.3±0.5			
1	13.62	12.75	6.35	3.61	2.31			
2	13.63	12.74	6.38	3.62	2.32			
3	13.60	12.80	6.33	3.64	2.30			
4	13.62	12.73	6.38	3.65	2.32			
5	13.53	12.76	6.32	3.64	2.34			
6	13.62	12.75	6.31	3.63	2.35			
7	13.64	12.74	6.35	3.64	2.34			
8	13.60	12.75	6.36	3.62	2.33			
9	13.62	12.71	6.36	3.61	2.31			
10	13.60	12.83	6.36	3.60	2.30			
MEAN	13.61	12.76	6.35	3.63	2.32			
R	0.11	0.12	0.07	0.05	0.05			

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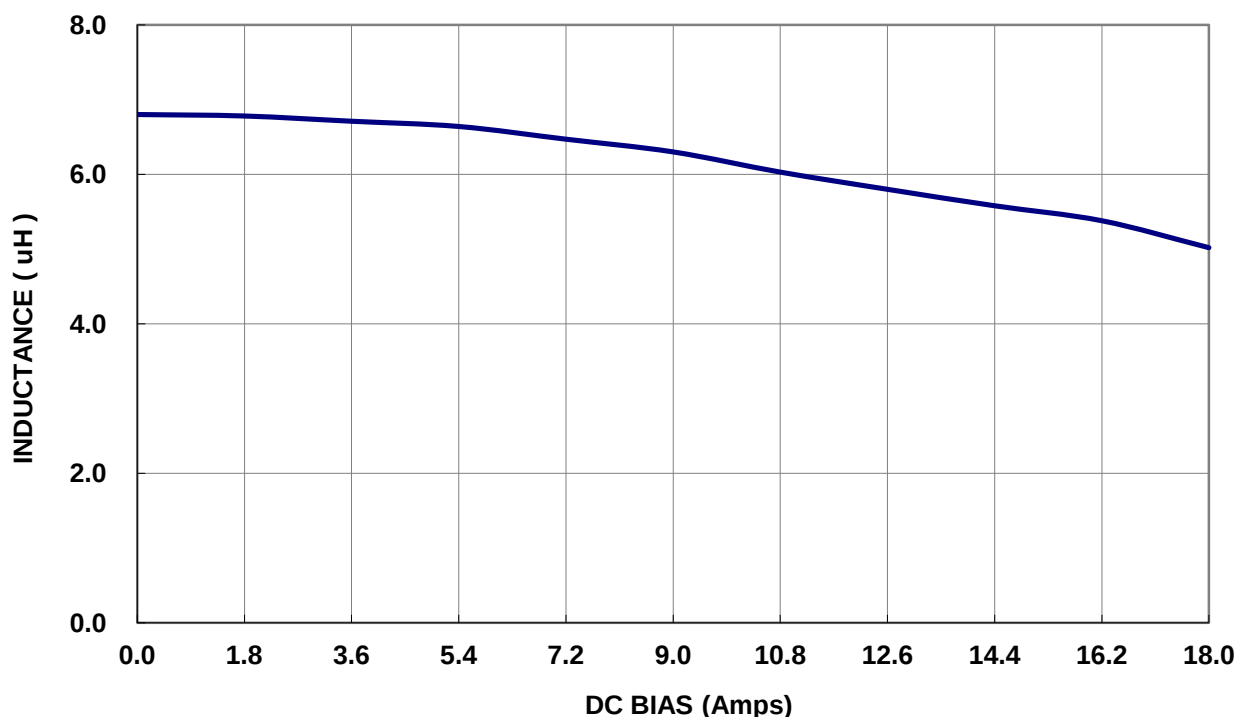
SPECIFICATION FOR APPROVAL

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CUSTOMER: JETWAY	DATE : 43726.72153
CUST P/NO:	REV NO: : A
MG PART : SRPG1207-6R8M-AW	PAGE NO : 4 / 8
MG P/NO :	MG NO :

INDUCTANCE (uH) VS DC BIAS (Amps)						
PART NO.	SRPG1207-6R8M-AW					
0.0 A	6.80	% L0				
1.8 A	6.78	99.71%				
3.6 A	6.71	98.68%				
5.4 A	6.64	97.65%				
7.2 A	6.47	95.15%				
9.0 A	6.30	92.65%				
10.8 A	6.03	88.68%				
12.6 A	5.80	85.29%				
14.4 A	5.58	82.06%				
16.2 A	5.38	79.12%				
18.0 A	5.02	73.82%				

CONDITION: 100KHz , 0.25Vrms



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SPECIFICATION FOR APPROVAL

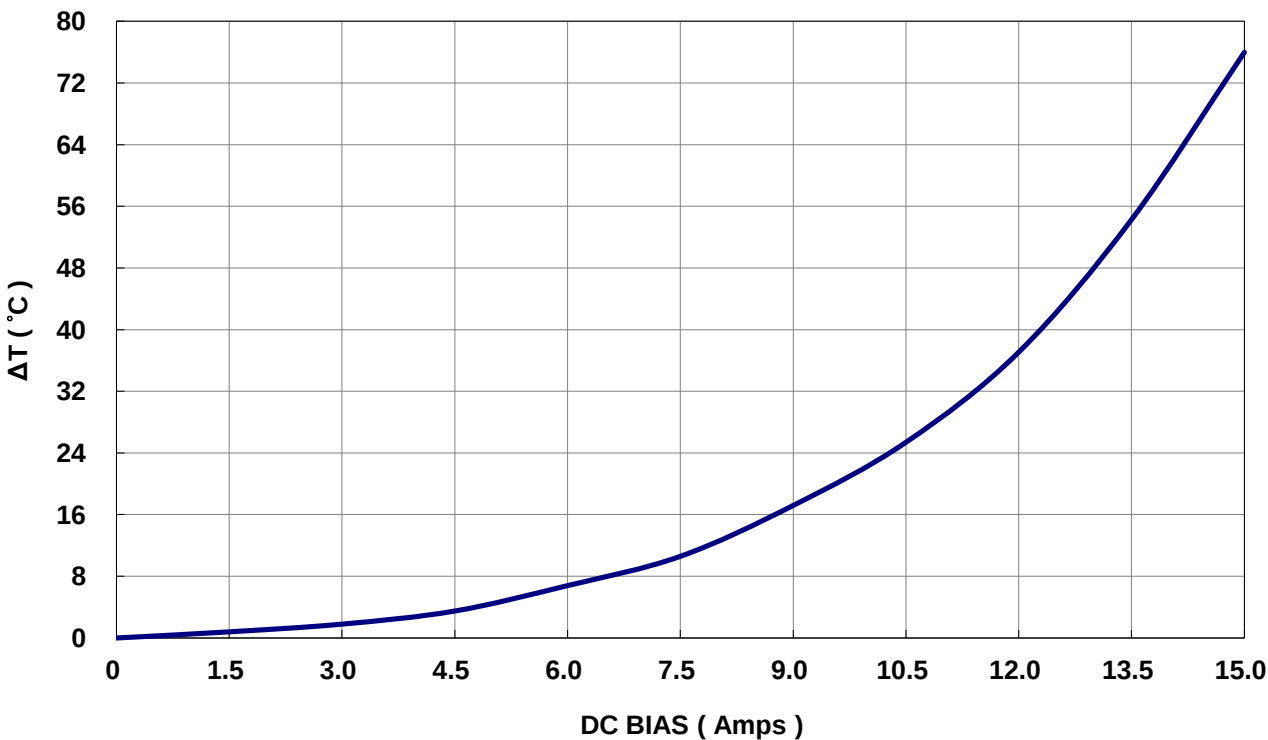
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CUSTOMER : JETWAY DATE : 43726.72153
CUST P/NO : REV NO: A
MG PART : SRPG1207-6R8M-AW PAGE NO : 5 / 8
MG P/NO : MG NO :

TEMPERATURE RISE ΔT ($^{\circ}\text{C}$) VS DC BIAS (Amps)

PART NO.	SRPG1207-6R8M-AW					
0 A	0	0 Minutes				
1.5 A	0.8	5 Minutes				
3.0 A	1.8	10 Minutes				
4.5 A	3.5	15 Minutes				
6.0 A	6.8	20 Minutes				
7.5 A	10.6	25 Minutes				
9.0 A	17.2	30 Minutes				
10.5 A	25.4	35 Minutes				
12.0 A	37.1	40 Minutes				
13.5 A	54.3	45 Minutes				
15.0 A	76.0	50 Minutes				

CONDITION: 1.0Vrms



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Recommended Soldering Conditions

■ For Lead-Free Application

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Figure 1. Re-flow Soldering

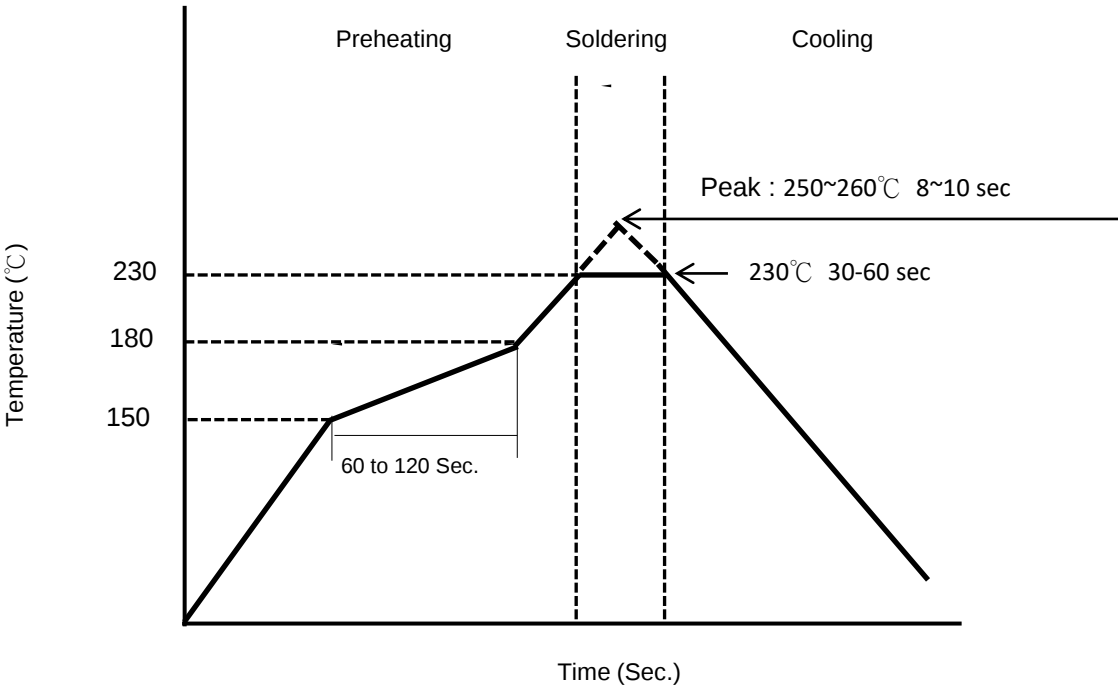
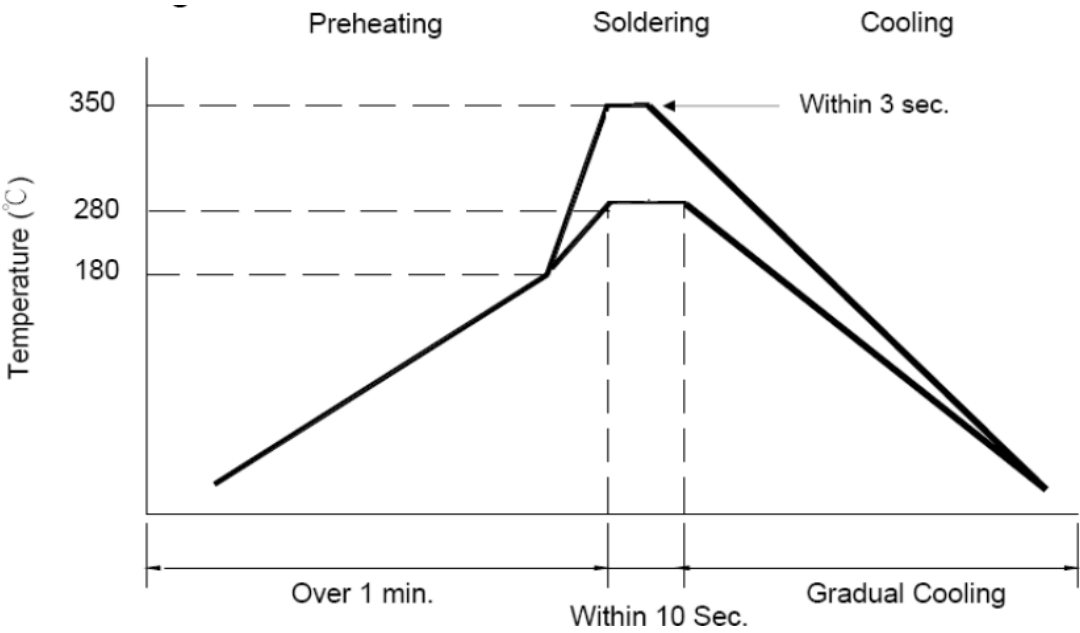
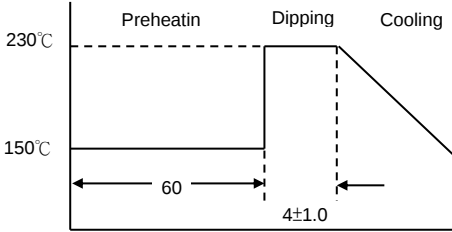
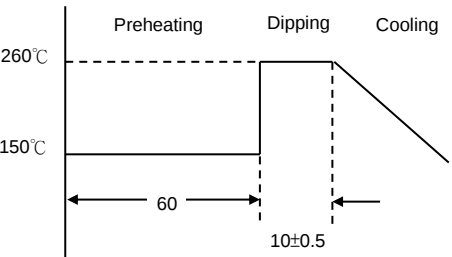


Figure 2. Hand Soldering



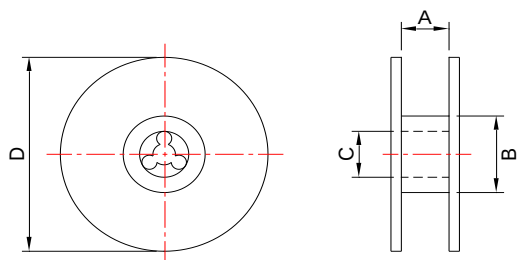
Reliability and Testing Conditions / Pin Type Power Inductors

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Item	Specification	Conditions															
Operating temperature range	-40°C ~ +125°C																
Storage temperature and humidity range	-40°C ~ +125°C , 70% RH Max																
Solderability	More than 90% of the terminal electrode should be covered with solder.	 Unit: Second															
Solder Heat Resistance	Inductance within ±20% of initial value. No disconnection or short circuit. The appearance shall not break.	 Unit: Second															
Heat resistance	Inductance within ±20% of initial value. No disconnection or short circuit. The appearance shall not break.	After 1000 hours in 125±5°C and 2 hour drying under normal condition.															
Cold resistance	Inductance within ±20% of initial value. No disconnection or short circuit. The appearance shall not break.	After 1000 hours in -40±5°C and 2 hour drying under normal condition.															
Thermal shock	Inductance within ±20% of initial value. No disconnection or short circuit. The appearance shall not break.	After 100 cycles of following condition. <table border="1"> <thead> <tr> <th>Step</th><th>Temperature (°C)</th><th>Times (min.)</th></tr> </thead> <tbody> <tr> <td>1</td><td>-40±5°C</td><td>30</td></tr> <tr> <td>2</td><td>Room Temperature</td><td>Within 3</td></tr> <tr> <td>3</td><td>125±5°C</td><td>30</td></tr> <tr> <td>4</td><td>Room Temperature</td><td>Within 3</td></tr> </tbody> </table>	Step	Temperature (°C)	Times (min.)	1	-40±5°C	30	2	Room Temperature	Within 3	3	125±5°C	30	4	Room Temperature	Within 3
Step	Temperature (°C)	Times (min.)															
1	-40±5°C	30															
2	Room Temperature	Within 3															
3	125±5°C	30															
4	Room Temperature	Within 3															
Humidity Resistance	Inductance within ±20% of initial value. No disconnection or short circuit. The appearance shall not break.	After 1000 hours in 40±2°C and 90 to 95% humidity , and 2 hour drying under normal condition.															
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.															

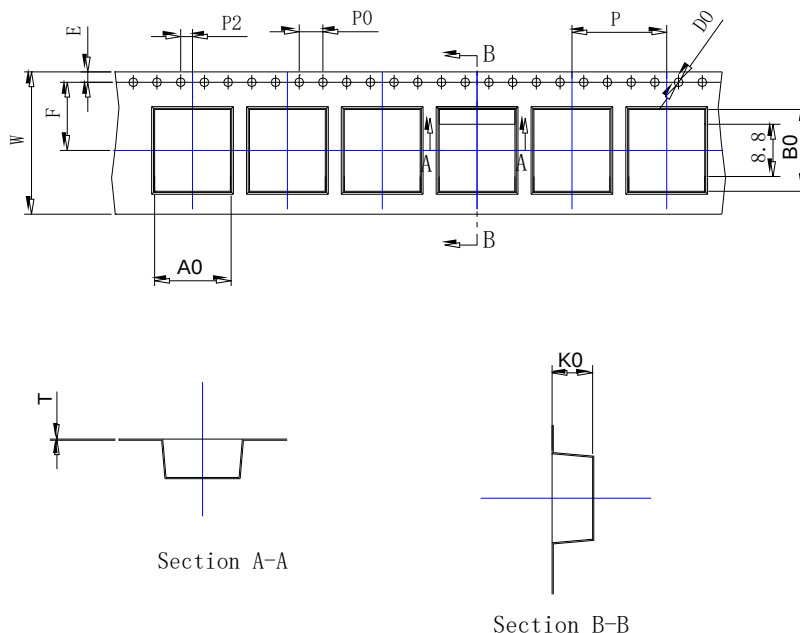
PACKAGING

Reel Dimension



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

Tape Dimension

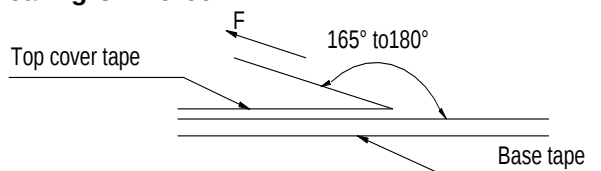


W	AO	BO	KO	P	F	E	PO	P2	T
24±0.3	13.0±0.1	13.9±0.1	6.6±0.1	16±0.3	11.5±0.1	1.75±0.1	4±0.1	2±0.1	0.35±0.05

Packaging Quantity

P/N	Chip/Reel	Inner Box	Carton
SRPG1207	500pcs	500pcs	2000pcs

Tearing Off Force



in the arrow direction under the following conditions			
Room Temp (°C)	Room Humidity (%)	Room atrn (hPa)	Teaming Speed (mm/min)
5~35	45~85	860~1060	300.0

※Storage Conditions

1. Temperature and humidity conditions: Less than 40°C and 70% RH.
2. Recommended products should be used within 6 months from the time of delivery.
3. The packaging material should be kept where no chlorine or sulfur exists in the air.

※Transportation

1. Products should be handled with care to avoid damage or contamination from perspiration and skin oils.
2. The use of tweezers or vacuum pick up is strongly recommended for individual components.
3. Bulk handling should ensure that abrasion and mechanical shock are minimized.

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CUST P/NO : REV NO: A
MG PART : SRPG1207-6R8M-AW PAGE NO : 9 /9
MG P/NO : MG NO :

MATERIAL IDENTIFICATION				
ITEM	DESCRIPTION	CLASS	SGS No. UL NO.	SUPPLIERS
Powder	carbony Iron powder			MAGIC TECHNOLOGY CO.,LTD.
WIRE	HAI			PACIFIC ELECTRONICS WIRE&CABLE CO.,LTD
Paint	Gray			HSIN JENG FONG CHEM PAINT CO.LTD
Chip	12 端片			DONG GUAN HUI GAO HARDWARE CO.,LTD
DRAWN BY :		CHECKED BY :		APPROVED BY :
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