

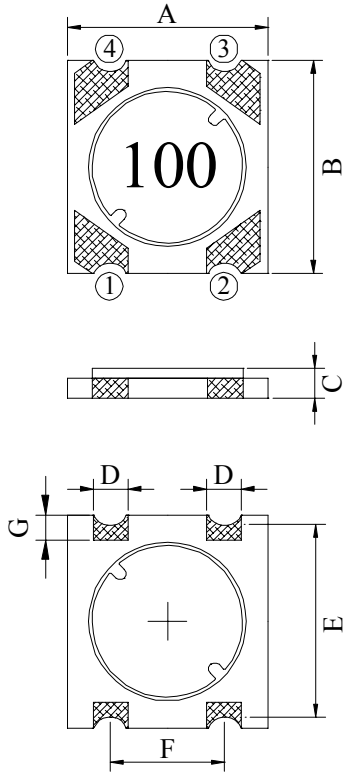
# SPECIFICATION FOR APPROVAL

REF :

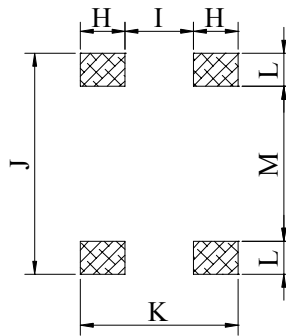
PAGE: 1

PROD. NAME	SMD POWER INDUCTOR	ABC'S DWG NO.	SB5009□□□□L□-□□□
		ABC'S ITEM NO.	

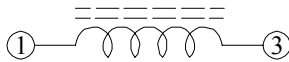
**. CONFIGURATION & DIMENSIONS :**



A	: 5.60 ±0.3	m/m
B	: 6.00 ±0.3	m/m
C	: 0.95 ±0.1	m/m
D	: 1.00 typ.	m/m
E	: 5.20 typ.	m/m
F	: 3.20 typ.	m/m
G	: 0.80 ref.	m/m
H	: 1.30 ref.	m/m
I	: 2.00 ref.	m/m
J	: 6.40 ref.	m/m
K	: 4.60 ref.	m/m
L	: 1.30 ref.	m/m
M	: 3.80 ref.	m/m



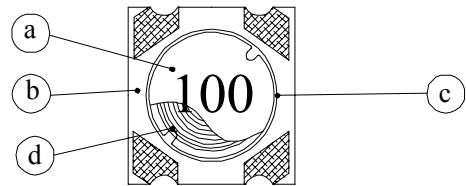
**. SCHEMATIC DIAGRAM :**



( PCB Pattern Suggestion )

**. MATERIALS :**

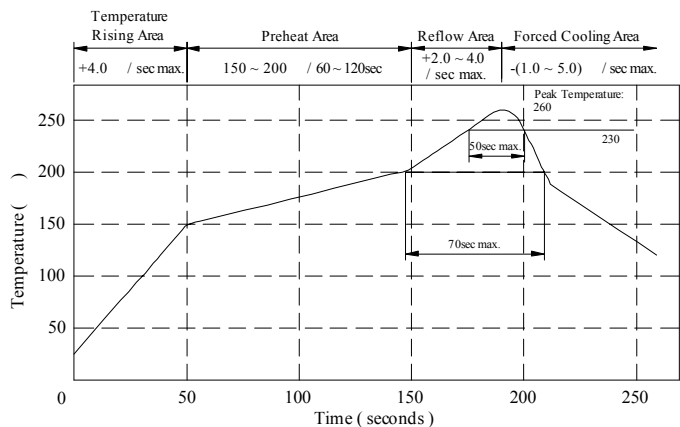
- a . Core : Ferrite DR core
- b . Base : PCB Base FR4
- c . Adhesive : Epoxy resin
- d . Wire : Enamelled copper wire ( class F )
- e . Terminal : Cu/Ni/Au
- f . Remark : Products comply with RoHS' requirements



Peak Temp : 260 max.  
 Max time above 230 : 50sec max.  
 Max time above 200 : 70sec max.

**. GENERAL SPECIFICATION :**

- a . Temp. rise : 40 typ.
- b . Storage Temp. : -40 ----+125
- c . Operating Temp. : -40 ----+125  
( Temp. rise Included )
- d . Resistance to solder heat : 260 .10 secs.



AE-001A

# SPECIFICATION FOR APPROVAL

REF :

PAGE: 2

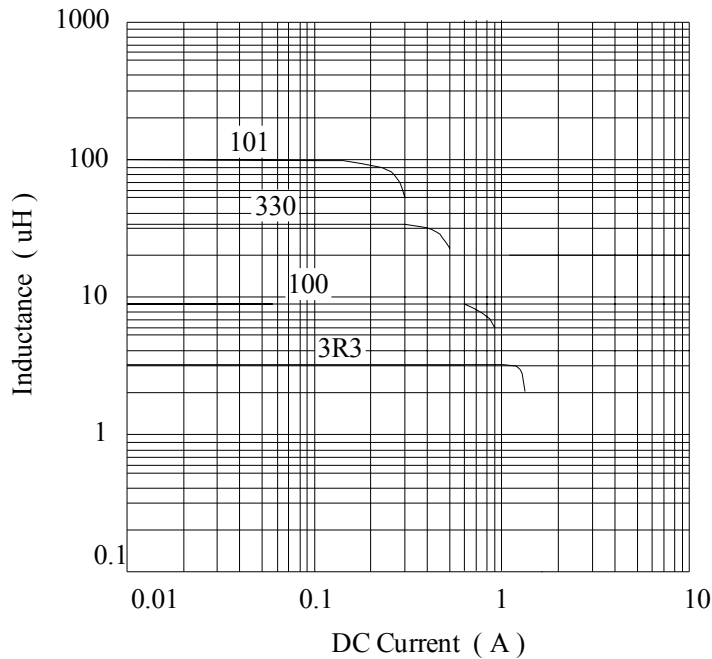
PROD. NAME	SMD POWER INDUCTOR	ABC'S DWG NO.	SB5009□□□□L□-□□□
		ABC'S ITEM NO.	

. ELECTRICAL CHARACTERISTICS :

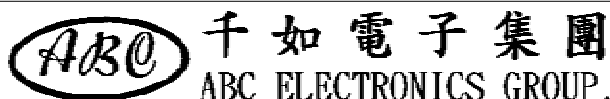
DWG No.	Inductance ( $\mu$ H)	Test Freq. ( Hz )	RDC ( $\Omega$ ) max.	Irms ( A ) typ.	Isat ( A ) typ.
SB50091R0ML□-□□□	1.0 $\pm$ 20%	100K	0.060	1.50	1.80
SB50092R2ML□-□□□	2.2 $\pm$ 20%	100K	0.098	1.20	1.35
SB50093R3ML□-□□□	3.3 $\pm$ 20%	100K	0.130	1.05	1.10
SB50094R7ML□-□□□	4.7 $\pm$ 20%	100K	0.165	0.90	1.00
SB50096R8ML□-□□□	6.8 $\pm$ 20%	100K	0.250	0.70	0.82
SB5009100ML□-□□□	10.0 $\pm$ 20%	100K	0.320	0.60	0.68
SB5009150ML□-□□□	15.0 $\pm$ 20%	100K	0.500	0.47	0.55
SB5009220ML□-□□□	22.0 $\pm$ 20%	100K	0.750	0.38	0.43
SB5009330ML□-□□□	33.0 $\pm$ 20%	100K	1.150	0.30	0.35
SB5009470ML□-□□□	47.0 $\pm$ 20%	100K	1.650	0.23	0.28
SB5009680ML□-□□□	68.0 $\pm$ 20%	100K	2.560	0.18	0.22
SB5009101ML□-□□□	100.0 $\pm$ 20%	100K	3.200	0.15	0.18

- 1). □ : Packaging information ... [A]: Bulk [B]: Taping Reel
- 2)."- □□□":Reference code
- 3).Inductance Test Freq : 100KHz / 1V
- 4). Irms Base on Temp. rise 40 typ.  
Isat Bae on L/L0A=10 % typ.

@ Inductance VS. DC Superposition Characteristics



AE-001A



# SPECIFICATION FOR APPROVAL

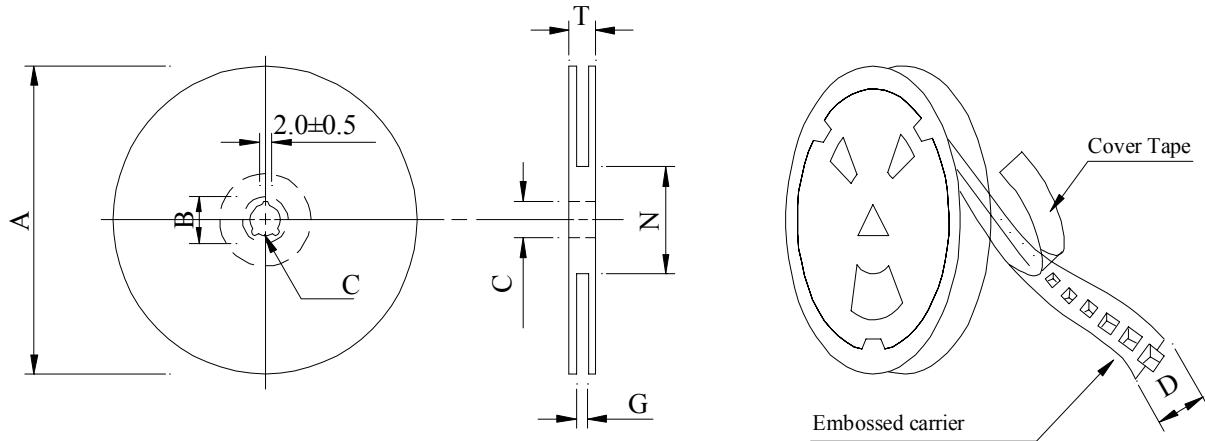
REF :

PAGE: 3

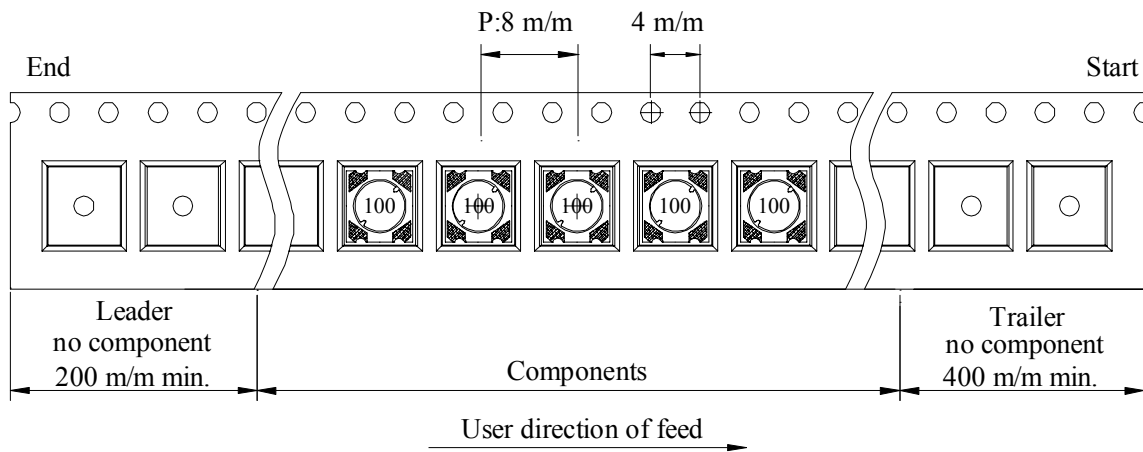
PROD. NAME	<b>SMD POWER INDUCTOR</b>	ABC'S DWG NO.	SB5009□□□□L□-□□□
		ABC'S ITEM NO.	

**PACKAGING INFORMATION :**

( 1 ) Configuration



Carrier Tape width : D



( 2 ) Dimensions

Unit:m/m

Style	A	B	C	D	G	N	T
07-12	178	21±0.8	13	12	14 <sup>+0</sup>	50 <sup>-0</sup>	16.5

( 3 ) Q'TY & G.W. Per package

Series	Inner : Reel			Outer : Carton		
	Q'TY (pcs)	G.W. (gw)	Style	Q'TY (pcs)	G.W. (Kg)	Size (cm)
SB5009	1200	99	07-12	48000	3.95	42 x 41 x 24

AE-001A



# SPECIFICATION FOR APPROVAL

REF :

PAGE: 5

PROD. NAME	SMD POWER INDUCTOR	ABC'S DWG NO.	SB5009□□□□L□-□□□
		ABC'S ITEM NO.	

. RELIABILITY TEST :

Test item	Specification	Test condition						
Solderability	More than 90% of the terminal electrode shall be covered With fresh solder.	Preheat : 150±25 for 60 seconds Solder : Sn96.5 / Ag3 / Cu0.5 or equivalent Solder temp. : 235±5 Flux : Rosin Dip time : 4±1 seconds						
Thermal shock test ( Temp. cycle )	Inductance shall not change more than ±20%	<table style="width: 100%; border: none;"> <tr> <td style="border: none;">Room temp. 15 minutes</td> <td style="border: none; text-align: center;">→</td> <td style="border: none; text-align: center;">-25±2 30 minutes</td> </tr> <tr> <td style="border: none;">Room temp. 15 minutes</td> <td style="border: none; text-align: center;">→</td> <td style="border: none; text-align: center;">85±2 30 minutes</td> </tr> </table> <p>Total : 50 cycles</p>	Room temp. 15 minutes	→	-25±2 30 minutes	Room temp. 15 minutes	→	85±2 30 minutes
Room temp. 15 minutes	→	-25±2 30 minutes						
Room temp. 15 minutes	→	85±2 30 minutes						
Humidity Resistance test		Temperature : 40±2 Humidity : 90 ~ 95% Applied current : Per spec. Time : 500 hours						
High temp. Resistance test		Temperature : 85±2 Applied current : Per spec. Time : 500 hours						

AE-001A

# SPECIFICATION FOR APPROVAL

REF :

PAGE: 6

PROD. NAME	SMD POWER INDUCTOR	ABC'S DWG NO.	SB5009□□□□L□-□□□
		ABC'S ITEM NO.	

UL CARD :

OBMW2
September 8, 2000

Magnet Wire-Component

JUNG SHING WIRE CO LTD
E174837

231 CHUNG CHENG RD, SEC 3 JEN-TEH HSIANG, TAINAN  
HSIEN TAIWAN

Mtl Dsg	Mark Dsg	BC	Coat Typ	OC	ANSI Type	Temp Class
AIW	---	Polyamideimide	---	---	MW81-C	220
CFUEWB	---	Polyurethane	---	---	MW75C	130
EIAIW	---	Polyesterimide	Polyamideimide	---	MW35C	200
EILOCKY	---	Polyesterimide	Polyamide	---	---	180
EILOCKW	---	Polyesterimide	Modified Epoxy	---	---	200
EIW	---	Polyesterimide	---	---	---	220
EIW-2	---	Polyesterimide	---	---	MW74-C	200
FL.EILOCKY	---	Modified Polyester	Polyamide	---	---	155
LSFFW	---	Polyurethane	---	---	MW79-C	155
LSUEW	---	Polyurethane	---	---	---	130
PEW	---	Polyester	---	---	---	155
PEY	---	Polyester	Nylon	---	MW24-C	155
SF.FLW	---	Modified Polyester	---	---	MW26C	155
SF.EIW	---	Polyesterimide	---	---	MW77C	180
SF.BY@	---	Modified Polyester	Nylon	---	MW27-C	155
SF.FLY@	---	Modified Polyester	Nylon	---	MW27-C	155
SF.BLOCKBS	---	Modified Polyester	Modified Polyamide	---	---	155
SF.EILOCKY#	---	Polyesterimide	Polyamide	---	---	180
SF.EILOCKBS	---	Polyesterimide	Modified Polyamide	---	---	180
SF.BW@	---	Modified Polyester	---	---	MW26C	155
SFFW	---	Polyurethane	---	---	MW79	155

287806002
Page 1 of 2
A not-for-profit organization dedicated to public safety and committed to quality service

Mtl Dsg	Mark Dsg	BC	Coat Typ	OC	ANSI Type	Temp Class
SFFY	---	Polyurethane	Polyamide	---	MW80C	155
UEW-1	---	Polyurethane	---	---	MW2-C	105
UEW-2	---	Polyurethane	---	---	---	130
UEW-4	---	Polyurethane	---	---	MW75C	130
UEY	---	Polyurethane	Nylon	---	MW28-C	130
UEY-2	---	Polyurethane	Polyamide	---	MW28-C	130

@-May be suffixed by LZ; # - May be suffixed by LZ, EL or LZI.  
LZ - Signifies magened wires twisted together; EL - signifies base coated magnet wire laid parallel with top coat applied overall; LZL - signifies base coated magnet wire twisted together and covered with top coat overall.

Marking: Company name or trademarks or 榮星電線, material designation or marked designation on packaed or reel, and Recognized Component Mark.

See General Information Preceding These Recognitions  
For use only in equipment where the acceptability of the combination is determined by Underwriters Laboratories Inc.

287806002
Page 2 of 2
OBMW2E174837  
September 8, 2000

AE-001A

