

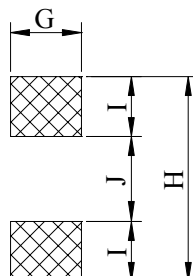
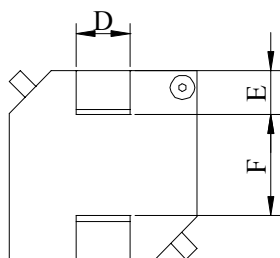
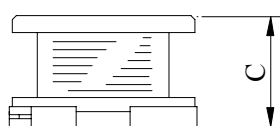
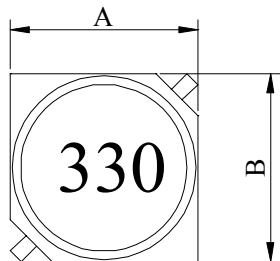
SPECIFICATION FOR APPROVAL

REF :

PAGE: 1

PROD. NAME	SMD POWER INDUCTOR	ABC'S DWG NO.	SB1045□□□□L□-□□□
		ABC'S ITEM NO.	

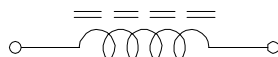
. CONFIGURATION & DIMENSIONS :



- A : 10.0±0.3 m/m
- B : 10.0±0.3 m/m
- C : 4.5±0.3 m/m
- D : 2.4 typ. m/m
- E : 2.0 typ. m/m
- F : 6.0 typ m/m
- G : 2.8 ref. m/m
- H : 10.4 ref. m/m
- I : 2.4 ref. m/m
- J : 5.6 ref. m/m

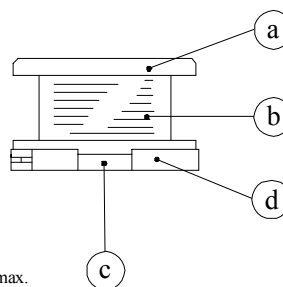
(PCB Pattern)

. SCHEMATIC DIAGRAM :



. MATERIALS :

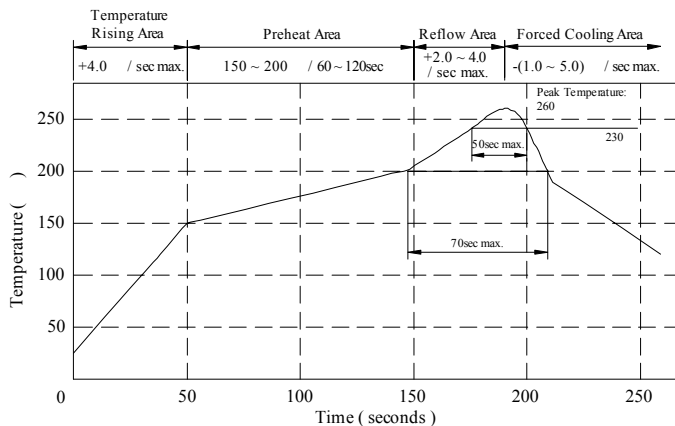
- a . Core : Ferrite DR core
- b . Wire : Enameled copper wire (class F)
- c . Terminal : Cu / Ni / Sn
- d . Base : LCP Base
- e . Adhesive : Epoxy resin
- f . Remark : Products comply with RoHS' requirements



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

. GENERAL SPECIFICATION :

- a . Temp. rise 40 max.
- 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

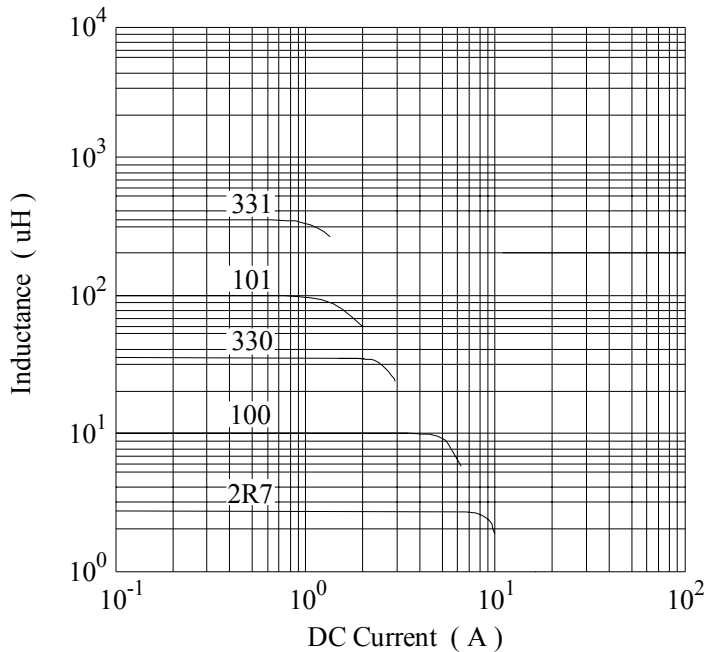
PROD. NAME	SMD POWER INDUCTOR	ABC'S DWG NO.	SB1045□□□□L□-□□□
		ABC'S ITEM NO.	

. ELECTRICAL CHARACTERISTICS :

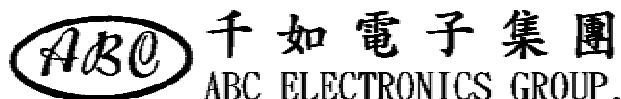
DWG No.	L (μ H)	Q ref.	Test Freq.		SRF (MHz) typ.	RDC (Ω) max.	Irms (A)	Isat (A)
			L (Hz)	Q (MHz)				
SB10452R7ML□-□□□	2.7 \pm 20%	25	100K/0.1V	7.96	68.7	0.026	4.80	6.20
SB10454R5ML□-□□□	4.5 \pm 20%	25	100K/0.1V	7.96	44.2	0.033	4.20	5.20
SB10456R8ML□-□□□	6.8 \pm 20%	22	100K/0.1V	7.96	35.8	0.040	3.50	4.20
SB1045100ML□-□□□	10.0 \pm 20%	26	100K/0.1V	2.52	27.8	0.050	3.20	3.60
SB1045150ML□-□□□	15.0 \pm 20%	26	100K/0.1V	2.52	23.7	0.068	2.50	3.00
SB1045220ML□-□□□	22.0 \pm 20%	22	100K/0.1V	2.52	19.4	0.088	2.20	2.60
SB1045330ML□-□□□	33.0 \pm 20%	20	100K/0.1V	2.52	15.8	0.110	1.90	2.10
SB1045470ML□-□□□	47.0 \pm 20%	21	100K/0.1V	2.52	13.6	0.165	1.60	1.85
SB1045680ML□-□□□	68.0 \pm 20%	21	100K/0.1V	2.52	11.1	0.225	1.30	1.50
SB1045101KL□-□□□	100.0 \pm 10%	14	100K/0.1V	0.796	9.7	0.300	1.10	1.30
SB1045151KL□-□□□	150.0 \pm 10%	16	100K/0.1V	0.796	7.1	0.500	0.85	1.05
SB1045221KL□-□□□	220.0 \pm 10%	15	100K/0.1V	0.796	6.4	0.680	0.72	0.85
SB1045331KL□-□□□	330.0 \pm 10%	12	100K/0.1V	0.796	4.6	0.950	0.62	0.70
SB1045471KL□-□□□	470.0 \pm 10%	12	100K/0.1V	0.796	4.2	1.280	0.52	0.58
SB1045681KL□-□□□	680.0 \pm 10%	13	100K/0.1V	0.796	3.6	1.920	0.43	0.46
SB1045102KL□-□□□	1000.0 \pm 10%	25	100K/0.1V	0.252	2.9	2.700	0.38	0.40

- 1). □: Packaging Information... [A]: Bulk [B]: Taping Reel
- 2). "-□□□": Reference code
- 3). Irms base on temp. rise 40 max.
- 4). Isat base on L/L0A=10% typ.

@ Inductance VS. DC Superposition Characteristics



AE-001A



SPECIFICATION FOR APPROVAL

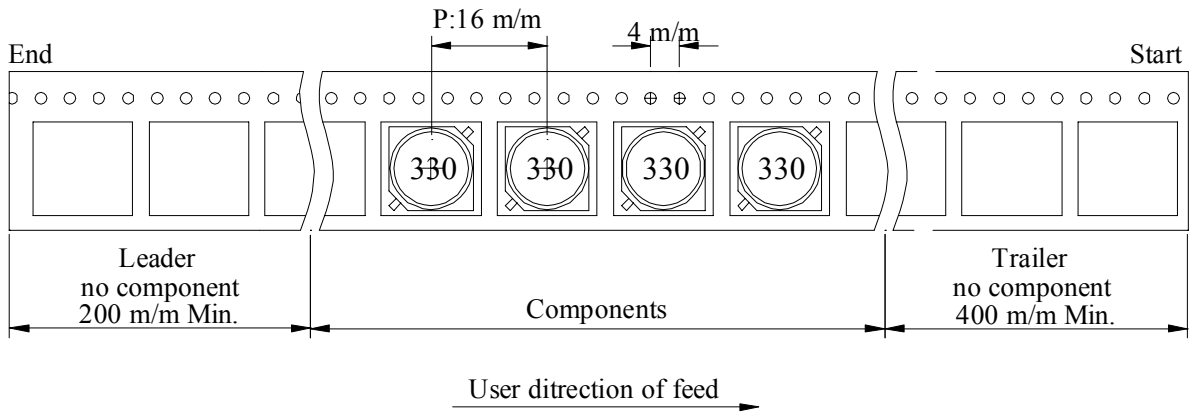
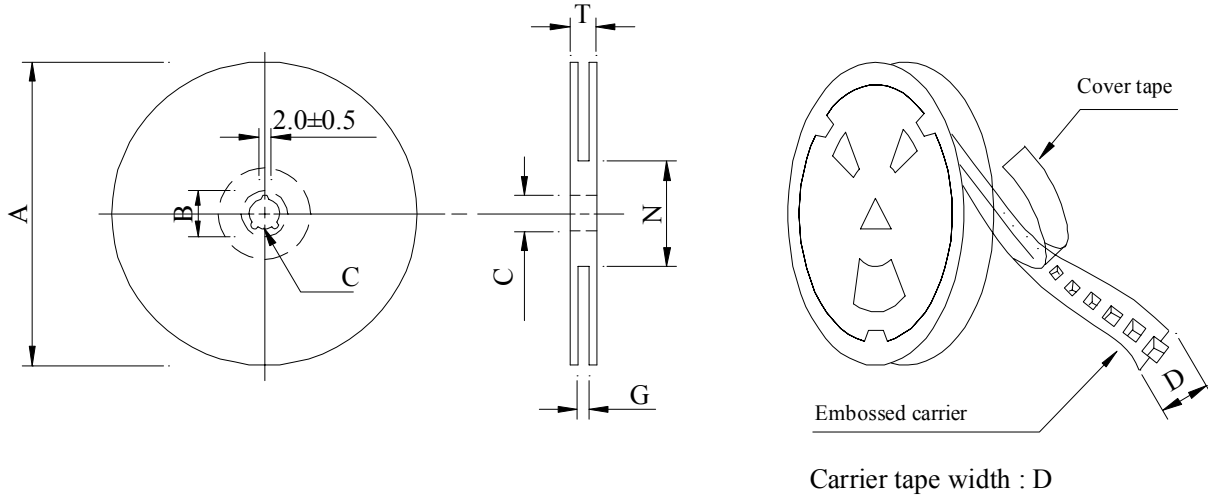
REF :

PAGE: 3

PROD. NAME	SHIELDED SMD POWER INDUCTOR	ABC'S DWG NO.	SB1045□□□□L□-□□□
		ABC'S ITEM NO.	

. PACKAGING INFORMATION :

(1) Configuration



(2) Dimensions

Unit:m/m

Style	A	B	C	D	G	N	T
13 - 24	330	21±0.8	13±0.5	24	26 ⁺⁰	50 ⁻⁰	30.4

(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)
SB1045	700	2,000	13 - 24	2,800	9.0	40 x 40 x 24

AE-001A



SPECIFICATION FOR APPROVAL

REF :

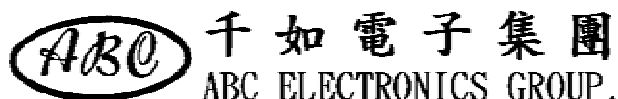
PAGE: 5

PROD. NAME	SMD POWER INDUCTOR	ABC'S DWG NO.	SB1045□□□□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.</td> <td style="border: none; text-align: center;">→</td> <td style="border: none; text-align: center;"><u>-25±2</u></td> </tr> <tr> <td style="border: none;">15 minutes</td> <td style="border: none;"></td> <td style="border: none; text-align: center;">30 minutes</td> </tr> <tr> <td colspan="3" style="border: none;"> </td> </tr> <tr> <td style="border: none;">Room temp.</td> <td style="border: none; text-align: center;">→</td> <td style="border: none; text-align: center;"><u>85±2</u></td> </tr> <tr> <td style="border: none;">15 minutes</td> <td style="border: none;"></td> <td style="border: none; text-align: center;">30 minutes</td> </tr> </table> <p>Total : 50 cycles</p>	Room temp.	→	<u>-25±2</u>	15 minutes		30 minutes				Room temp.	→	<u>85±2</u>	15 minutes		30 minutes
Room temp.	→	<u>-25±2</u>															
15 minutes		30 minutes															
Room temp.	→	<u>85±2</u>															
15 minutes		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.	SB1045□□□□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 magnet 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.

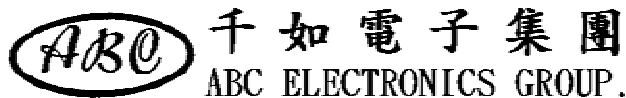
Marking: Company name or trademarks or 榮星電線, material designation or marked designation on packaed or reel, and Recognized Component Mark.

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



SPECIFICATION FOR APPROVAL

REF :

PAGE: 7

PROD. NAME	SMD POWER INDUCTOR	ABC'S DWG NO.	SB1045□□□□L□-□□□
		ABC'S ITEM NO.	

		SUMITOMO CHEMICAL CO LTD					E54705 (M)				
		5-33 KITAHAMA 4-CHOME CHUO-KO, OSAKA JAPAN									
Mtl Dsg	Col	Min Thk mm	UL94 Flame Class	RTI			H W I	H A I	H V T R	D 4 9 5	C T I
				Elec	Mech with Imp	w/o Imp					
Liquid crystal polyester (LCP), designated "EKONOL" or "SUMIKASUPER", furnished in the form of pellets, (Contd)											
E4008, E400X	NC, BK	0.30	94V-0	130	130	130	—	—	—	—	—
		0.75	94V-0	130	130	130	3	4	—	—	—
		1.5	94V-0	130	130	130	2	4	—	—	—
		3.0	94V-0	130	130	130	1	4	0	5	4
E4008	NC, WT, BK	0.30	94V-0	130	130	130	—	—	—	—	—
		0.75	94V-0	220	180	220	3	4	—	—	—
		1.5	94V-0	220	200	240	2	4	—	—	—
		3.0	94V-0	220	200	240	1	4	0	5	4
E4010	NC, BK	0.30	94V-0	130	130	130	—	—	—	—	—
		0.75	94V-0	220	180	220	3	4	—	—	—
		1.5	94V-0	220	200	240	2	4	—	—	—
		3.0	94V-0	220	200	240	1	4	0	5	4
E400(Y)L, E4008L	NC, BK	0.30	94V-0	130	130	130	—	—	—	—	—
		0.75	94V-0	130	130	130	3	4	—	—	—
		1.5	94V-0	130	130	130	2	4	—	—	—
		3.0	94V-0	130	130	130	1	4	0	5	4
E4810	NC, BK	0.30	94V-0	130	130	130	—	—	—	—	—
		0.75	94V-0	130	130	130	0	4	—	—	—
		1.5	94V-0	130	130	130	0	4	—	—	—
		3.0	94V-0	130	130	130	1	4	0	5	4

(X) Denotes any number 1 thru 9.
(Y) Denotes any number 1 thru 7.

AE-001A

