

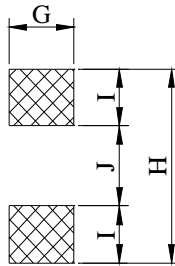
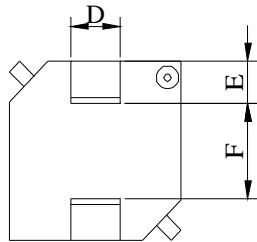
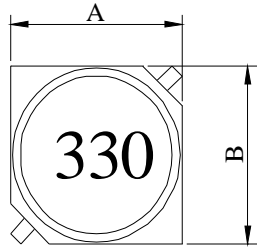
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PROD. NAME	SMD POWER INDUCTOR	ABC'S DWG NO.	SB7045□□□□L□-□□□
		ABC'S ITEM NO.	

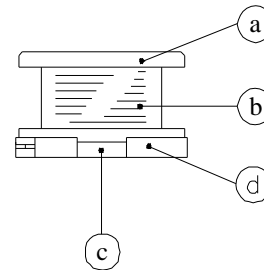
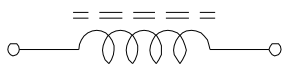
I . CONFIGURATION & DIMENSIONS :



(PCB Pattern)

- A : 7.0±0.3 m/m
- B : 7.0±0.3 m/m
- C : 4.5±0.3 m/m
- D : 2.0 typ. m/m
- E : 1.5 typ. m/m
- F : 4.0 typ. m/m
- G : 2.4 ref. m/m
- H : 7.8 ref. m/m
- I : 1.8 ref. m/m
- J : 4.2 ref. m/m

II . SCHEMATIC DIAGRAM :



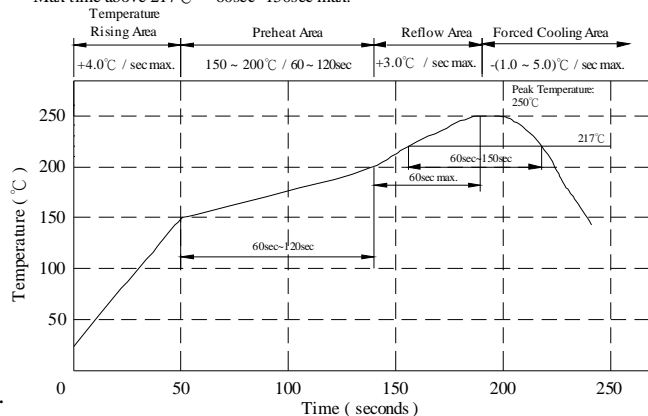
III . MATERIALS :

- 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 : 250°C max.
 Max. Peak Temp - 5°C : 30sec max.
 Max time above 217°C : 60sec~150sec max.

IV . GENERAL SPECIFICATION :

- a . Temp. rise : 40°C max.
- b . Storage Temp. : -40°C ----+125°C
- c . Operating Temp. : -40°C----+125°C
(Temp. rise included)
- d . Resistance to solder heat : 250°C.10 secs.



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V . ELECTRICAL CHARACTERISTICS :

DWG No.	Inductance (μ H) 100KHz / 0.1V	Q ref.	Test Freq. (MHz)	SRF (MHz) typ.	RDC (Ω) max.	I _{rms} (A) max.	I _{sat} (A) typ.
SB70451R2ML□-□□□	1.2±20%	25	7.96	90	0.022	3.80	5.00
SB70451R5ML□-□□□	1.5±20%	26	7.96	109	0.027	3.50	4.50
SB70452R2ML□-□□□	2.2±20%	24	7.96	79	0.032	3.30	4.00
SB70453R3ML□-□□□	3.3±20%	23	7.96	47	0.036	2.80	3.70
SB70454R7ML□-□□□	4.7±20%	23	7.96	38	0.042	2.60	3.40
SB70456R8ML□-□□□	6.8±20%	22	7.96	35	0.054	2.25	2.70
SB7045100ML□-□□□	10.0±20%	28	2.52	23	0.070	2.00	2.30
SB7045150ML□-□□□	15.0±20%	24	2.52	19	0.086	1.60	1.90
SB7045220ML□-□□□	22.0±20%	26	2.52	18	0.125	1.40	1.62
SB7045330ML□-□□□	33.0±20%	20	2.52	18	0.150	1.22	1.32
SB7045470KL□-□□□	47.0±10%	21	2.52	11	0.230	1.00	1.10
SB7045680KL□-□□□	68.0±10%	17	2.52	11	0.280	0.90	0.92
SB7045101KL□-□□□	100.0±10%	17	0.796	10	0.430	0.75	0.72
SB7045151KL□-□□□	150.0±10%	17	0.796	8	0.580	0.62	0.58
SB7045221KL□-□□□	220.0±10%	22	0.796	6	0.930	0.50	0.48
SB7045331KL□-□□□	330.0±10%	20	0.796	6	1.240	0.42	0.40
SB7045471KL□-□□□	470.0±10%	20	0.796	4	1.850	0.34	0.30
SB7045681KL□-□□□	680.0±10%	18	0.796	4	2.400	0.30	0.26
SB7045102KL□-□□□	1000.0±10%	48	0.252	3	4.000	0.22	0.20

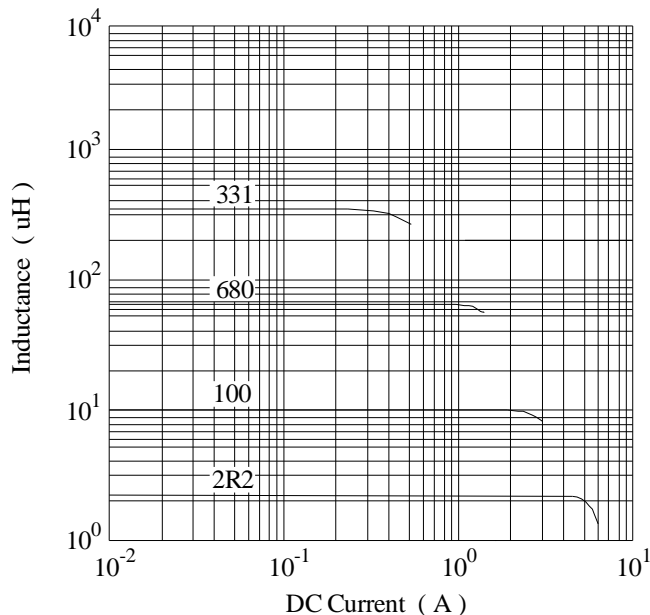
1). □ : Packaging information ... **A** □ Bulk **B** □ Taping Reel

2). "-□□□":Reference code

3). I_{rms} Base on Temp. rise 40°C max.

4). I_{sat} Base on $\Delta L/L0A=10\%$ typ.

@ Inductance VS. DC Superposition Characteristics



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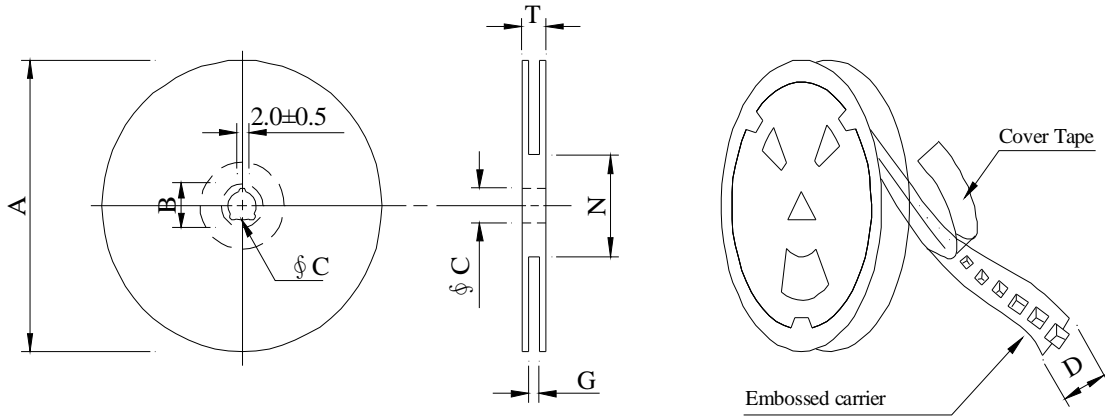
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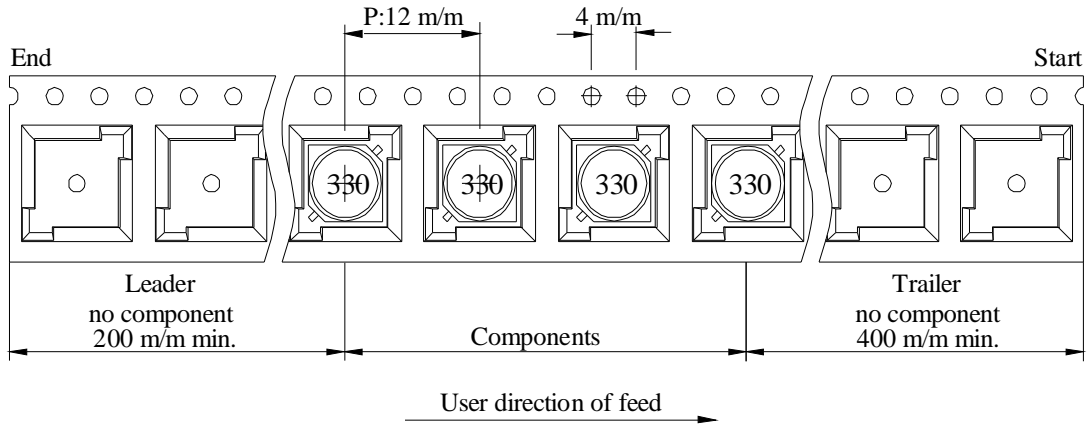
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		ABC'S ITEM NO.	

VI . PACKAGING INFORMATION :

(1) Configuration



※Carrier Tape width : D



(2) Dimensions

Unit:m/m

STYLE	A	B	C	D	G	N	T
13 - 16	330	21±0.8	13±0.5	16	18 ⁺⁰	50 ⁻⁰	22.4

(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)
SB7045	1,000	255	13 - 16	6,000	1.84	38 x 37 x 22

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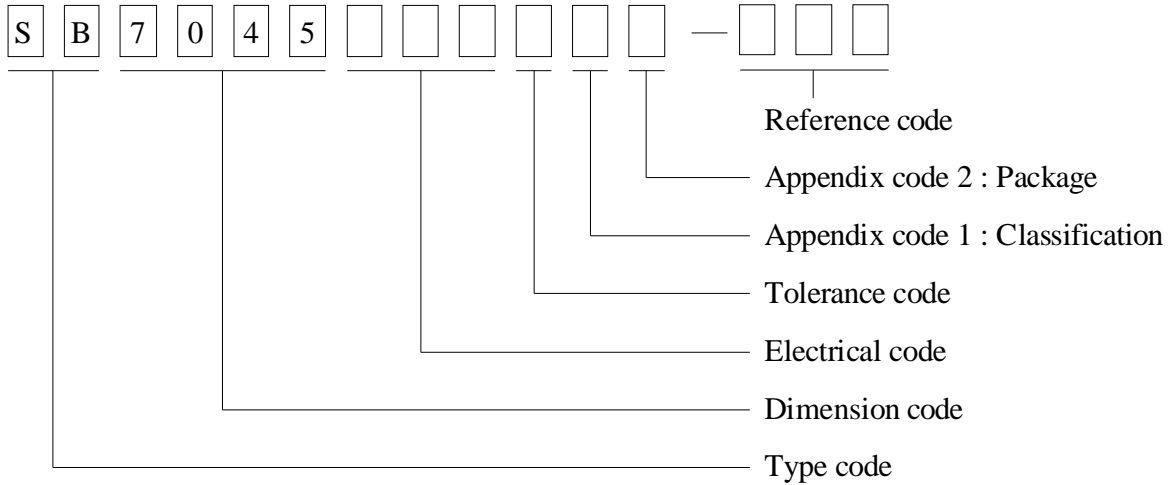
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VII . DWGING NUMBER EXPRESSION :



Appendix code 1 : Product Classification

- L : Lead Free Standard products comply with RoHS' requirements
- 1 ~ 9 : Lead Free Special products comply with RoHS' requirements

Appendix code 2 : Package Information

Code	Inner package	Inner package Q'TY	Remark
A	T.B.D.	T.B.D.	
B	T / R (Reel package)	1000 pcs	

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VIII . RELIABILITY TEST :

Test item	Specification	Test condition						
Solderability	More than 95% of the terminal electrode shall be covered With fresh solder.	Preheat : 155°C / 4 hours. Solder : Sn96.5 / Ag3 / Cu0.5 or equivalent Solder temp. : 235±5°C Flux : Rosin Dip time : 5±0.5 seconds						
Thermal shock test (Temp. cycle)	Electrical oharacteristics shall not change more than ±20%	<table style="width: 100%; border: none;"> <tr> <td style="text-align: center;">Room temp. 15 minutes</td> <td style="text-align: center;">→</td> <td style="text-align: center;">-40 °C 30 minutes</td> </tr> <tr> <td style="text-align: center;">Room temp. 15 minutes</td> <td style="text-align: center;">→</td> <td style="text-align: center;">+125 °C 30 minutes</td> </tr> </table> <p>Total : 50 cycles</p>	Room temp. 15 minutes	→	-40 °C 30 minutes	Room temp. 15 minutes	→	+125 °C 30 minutes
Room temp. 15 minutes	→	-40 °C 30 minutes						
Room temp. 15 minutes	→	+125 °C 30 minutes						
Humidity Test		Temperature : 40±2°C Humidity : 90±5% Time : 1000 hours						
High temp. Resistance test		Temperature : 125±5°C Applied current : Per spec. Time : 96 hours						

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SUMITOMO CHEMICAL CO LTD		E54705 (M)									
5-33 KITAHAMA 4-CHOME CHUO-KO, OSAKA JAPAN											
Mtl Dsg	Col	Min Thk mm	UL94 Flame Class	Elec	RTI		H W I	H A I	H V T R	D 4 9 5	C T I
					with Imp	Mech 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.