SMD POWER INDUCTORS

SSB0703 SERIES

1. PART NO. EXPRESSION :

S S B 0 7 0 3 1 0 1 M Z F

(a) (b) (c) (d)(e)(f)

(a) Series code

(b) Dimension code

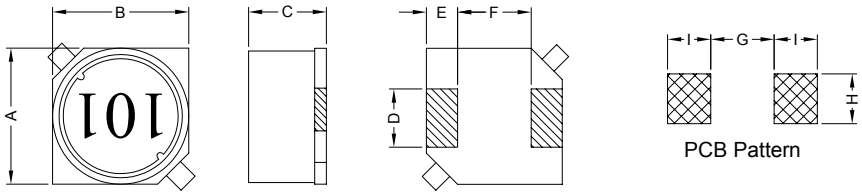
(c) Inductance code : 101 = 100uH

(d) Tolerance code : M = ±20%

(e) X, Y, Z : Standard part

(f) F : Lead Free

2. CONFIGURATION & DIMENSIONS :

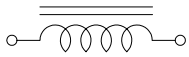


PCB Pattern

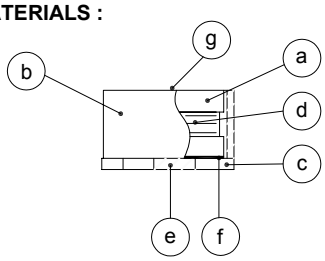
Unit:m/m

A	B	C	D	E	F	G	H	I
7.0±0.3	7.0±0.3	3.0±0.3	2.0±0.2	1.5±0.2	4.0±0.2	3.7 Ref.	2.2 Ref.	1.9 Ref.

3. SCHEMATIC :



4. MATERIALS :



(a) Core : DR Ferrite Core

(b) Core : RI Ferrite Core

(c) Base : LCP

(d) Wire : Enamelled Copper Wire

(e) Terminal : Tinned Copper Plate

(f) Adhesive : Epoxy

(g) Ink : Bon Margue

5. GENERAL SPECIFICATION :

a) Temp. rise : 40°C Max.

b) Rated current : Base on temp. rise & ΔL/L0A = 10% Max.

c) Storage temp. : -40°C to +125°C

d) Operating temp. : -40°C to +85°C

e) Resistance to solder heat : 260°C.10 secs

RoHS Compliant

NOTE : Specifications subject to change without notice. Please check our website for latest information.

18.04.2008

6. ELECTRICAL CHARACTERISTICS :

Part No.	Inductance (μH)	Test Frequency (Hz)	RDC (mΩ) Max.	IDC (A) Max.
SSB07031R0MZF	1.0±20%	1V / 100K	26	3.25
SSB07031R5MZF	1.5±20%	1V / 100K	31	3.00
SSB07032R2MZF	2.2±20%	1V / 100K	37	2.55
SSB07033R3MZF	3.3±20%	1V / 100K	48	2.40
SSB07034R7MZF	4.7±20%	1V / 100K	55	2.10
SSB07036R8MZF	6.8±20%	1V / 100K	75	1.90
SSB0703100MZF	10.0±20%	1V / 100K	100	1.50
SSB0703120MZF	12.0±20%	1V / 100K	120	1.45
SSB0703150MZF	15.0±20%	1V / 100K	130	1.20
SSB0703180MZF	18.0±20%	1V / 100K	160	1.15
SSB0703220MZF	22.0±20%	1V / 100K	190	1.05
SSB0703270MZF	27.0±20%	1V / 100K	240	1.00
SSB0703330MZF	33.0±20%	1V / 100K	300	0.90
SSB0703390MZF	39.0±20%	1V / 100K	340	0.80
SSB0703470MZF	47.0±20%	1V / 100K	400	0.75
SSB0703560MZF	56.0±20%	1V / 100K	550	0.68
SSB0703680MZF	68.0±20%	1V / 100K	650	0.65
SSB0703820MZF	82.0±20%	1V / 100K	720	0.60
SSB0703101MZF	100.0±20%	1V / 100K	820	0.50
SSB0703121MZF	120.0±20%	1V / 100K	1100	0.48
SSB0703151MZF	150.0±20%	1V / 100K	1300	0.45
SSB0703181MZF	180.0±20%	1V / 100K	1500	0.38
SSB0703221MZF	220.0±20%	1V / 100K	2100	0.35
SSB0703271MZF	270.0±20%	1V / 100K	2400	0.30
SSB0703331MZF	330.0±20%	1V / 100K	3100	0.28
SSB0703391MZF	390.0±20%	1V / 100K	4100	0.25
SSB0703471MZF	470.0±20%	1V / 100K	4400	0.23
SSB0703561MZF	560.0±20%	1V / 100K	5100	0.20
SSB0703681MZF	680.0±20%	1V / 100K	7100	0.18
SSB0703821MZF	820.0±20%	1V / 100K	7900	0.17
SSB0703102MZF	1000.0±20%	1V / 100K	9000	0.16

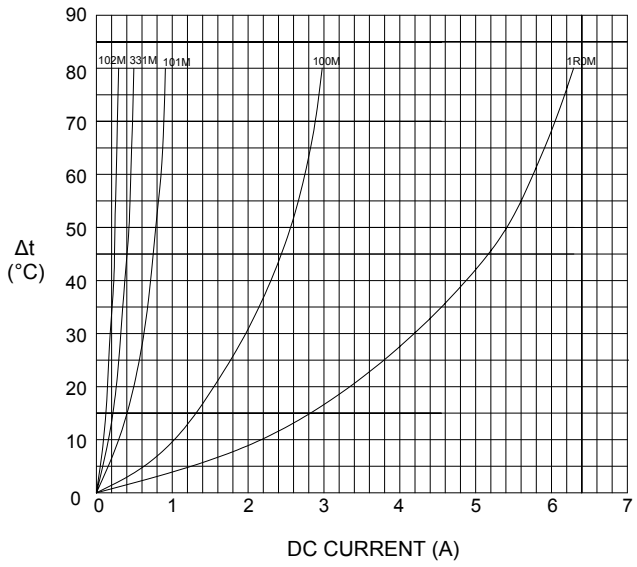
Pb

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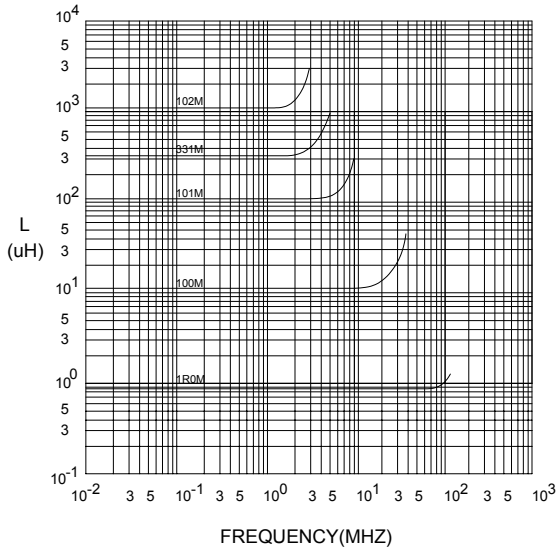
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7. CHARACTERISTICS CURVES :

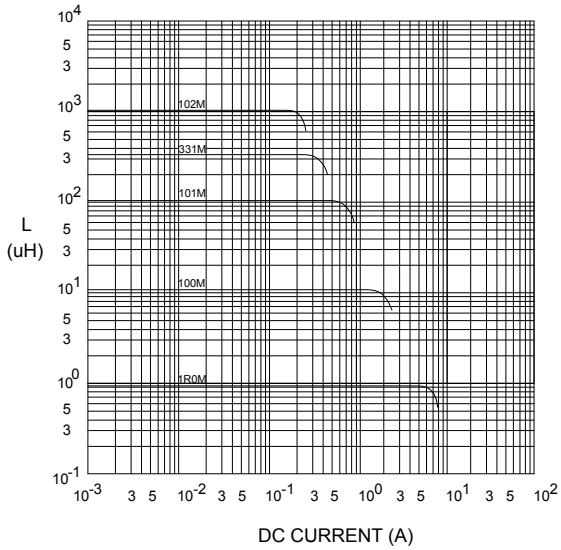
@ TEMP. RISE VS. DC SUPERPOSITION RESPONSE CURVE



@ INDUCTANCE VS. FREQUENCY RESPONSE CURVE



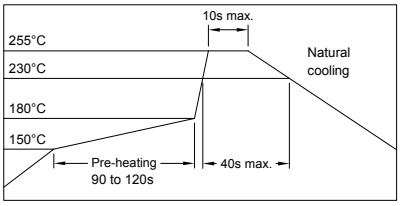
@ INDUCTANCE VS. DC SUPERPOSITION RESPONSE CURVE



RoHS Compliant

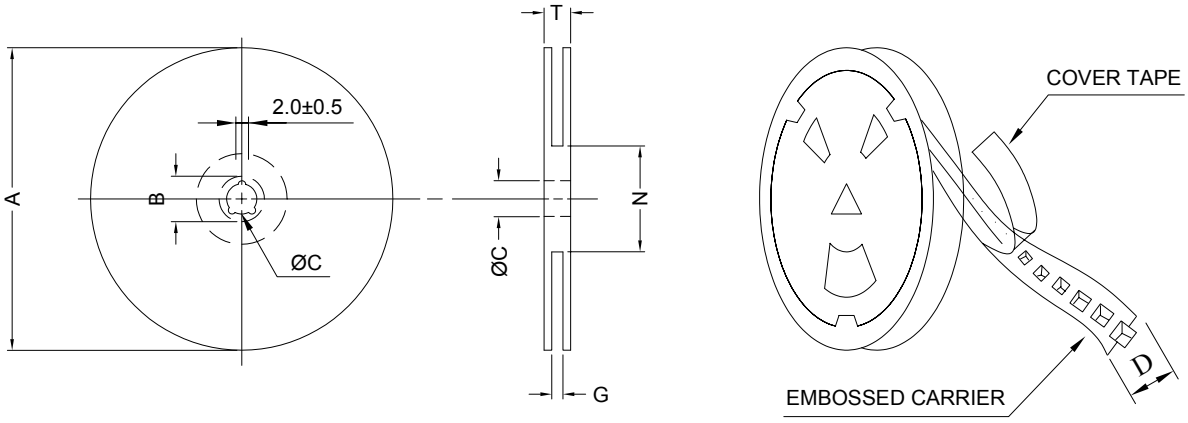
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RECOMMENDED SOLDERING CONDITIONS
REFLOW SOLDERINGS

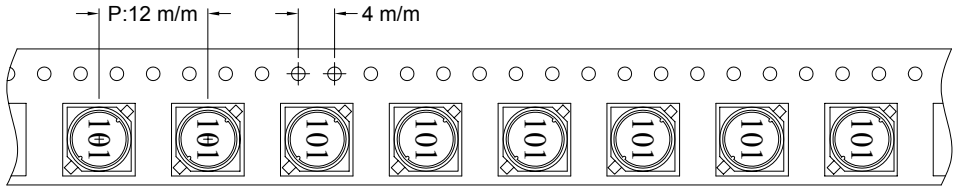


8. PACKAGING INFORMATION :

(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	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)
SSB0703	1000	630	13-16	6000	7.3	40 x 40 x 24

RoHS Compliant

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9. RELIABILTY AND TEST CONDITION :

TEST ITEM	SPECIFICATION	TEST CONDITION
SOLDERABILITY	MORE THAN 90% OF THE TERMINAL ELECTRODE SHALL BE COVERED WITH FRESH SOLDER.	PREHEAT : 125±25°C FOR 60 SECONDS SOLDER : 99%Sn/0.3%Ag/0.7%Cu or equivalent SOLDER TEMP. : 245±5°C FLUX : ROSIN DIP TIME : 4±1 SECONDS
THERMAL SHOCK TEST (TEMP. CYCLE)	INDUCTANCE SHALL NOT CHANGE MORE THAN ±20%	ROOM TEMP. (15 MINUTES) → -25±2°C (30 MINUTES) ROOM TEMP. (15 MINUTES) → 85±2°C (30 MINUTES) TOTAL : 50 CYCLES
HUMIDITY RESISTANCE TEST		TEMPERATURE : 40±2°C HUMIDITY : 90 ~ 95% APPLIED CURRENT : PER SPEC. TIME : 500 HOURS
HIGH TEMP. RESISTANCE TEST		TEMPERATURE : 85±2°C APPLIED CURRENT : PER SPEC. TIME : 500 HOURS

RoHS Compliant

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10. UL CARD :

OBMW2 November 30, 2000

Magnet Wire - Component

PACIFIC ELECTRIC WIRE & CABLE (SHENZHEN) CO LTD E201757
607 BAOLONG INDUSTRIAL ESTATE LONGGANG, SHENZHEN
GUANGDONG CHINA

	Coating Type		ANSI	
Mtl Dsg	BC	TC	Type	TI
UEW/U	**Polyurethane**	—	—	**130**
PEW/U	**Polyester**	—	**MW5-C**	**155°C**
PEWH/U	**Modified Polyester**	—	**MW30-C**	**180**
PEW-NY/U	**Polyester**	**Polyamide**	**MW24-C**	**155**
HAI/U	**Polyester(Amide)(Imide)**	**Polyamideimide**	**MW35,73**	**200**
UEW-NY/U	**Polyurethane**	**Polyamide**	**MW80-C**	**155**
			MW28-C	**130**

Marking: Company name and material designation or marked designation on package or reel, and Recognized Component Mark.

See General Information Preceding These Recognitions

1/3/2001 Underwriters Laboratories Inc. Card 1 of 2

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 Mech with Imp	RTI Mech w/o Imp	H W I	H A I	H V T R	D 4 9 5	C T I
Liquid crystal plyester (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.

RoHS Compliant