SMD POWER INDUCTORS

SSB1205 SERIES

1. PART NO. EXPRESSION :

S S B 1 2 0 5 4 R 7 M Z F

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

(a) Series code

(b) Dimension code

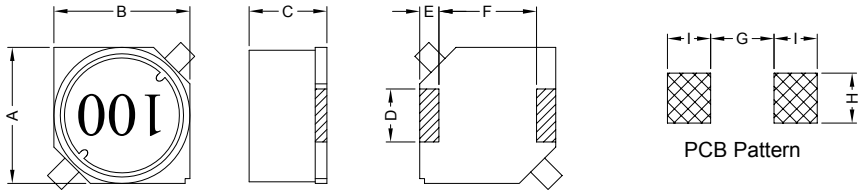
(c) Inductance code : 4R7 = 4.7uH

(d) Tolerance code : M = ±20%

(e) X, Y, Z : Standard part

(f) F : Lead Free

2. CONFIGURATION & DIMENSIONS :

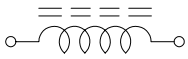


PCB Pattern

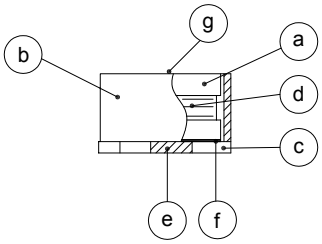
Unit:m/m

A	B	C	D	E	F	G	H	I
12.50±0.3	12.50±0.3	5.50±0.3	3.0±0.10	2.0±0.15	8.6±0.30	5.6 Ref.	3.2 Ref.	2.5 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) Irms : Temp. rise 40°C Typ.

b) Isat : ΔL/L0A = 10% Typ.

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.

08.05.2008

6. ELECTRICAL CHARACTERISTICS :

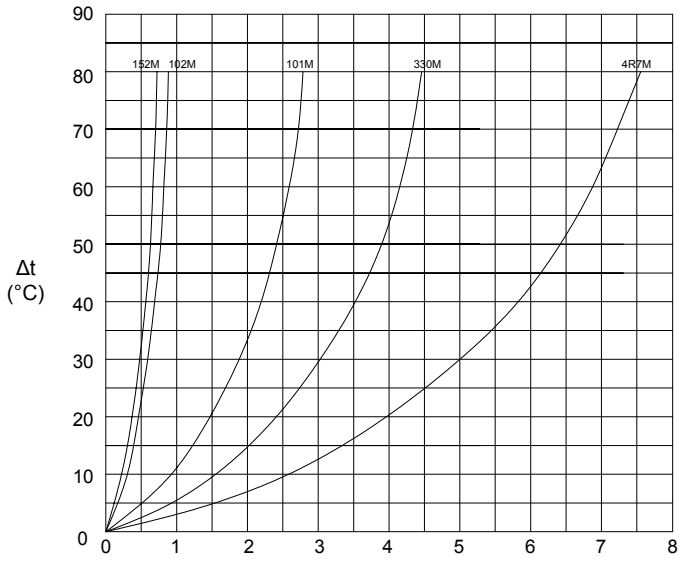
Part No.	Inductance (μH)	Test Frequency (Hz)	RDC (mΩ) Max.	Irms (A) Typ.	Isat (A) Typ.
SSB12054R7MZF	4.7±20%	1V / 100K	23	5.30	5.00
SSB12056R8MZF	6.8±20%	1V / 100K	25	5.00	4.00
SSB1205100MZF	10.0±20%	1V / 100K	30	4.50	3.50
SSB1205150MZF	15.0±20%	1V / 100K	38	4.00	2.80
SSB1205220MZF	22.0±20%	1V / 100K	46	3.50	2.30
SSB1205330MZF	33.0±20%	1V / 100K	60	3.20	1.90
SSB1205470MZF	47.0±20%	1V / 100K	85	2.50	1.60
SSB1205680MZF	68.0±20%	1V / 100K	110	2.20	1.30
SSB1205101MZF	100.0±20%	1V / 100K	150	1.80	1.10
SSB1205151MZF	150.0±20%	1V / 100K	240	1.40	0.90
SSB1205221MZF	220.0±20%	1V / 100K	350	1.20	0.72
SSB1205331MZF	330.0±20%	1V / 100K	500	1.00	0.60
SSB1205471MZF	470.0±20%	1V / 100K	710	0.88	0.50
SSB1205681MZF	680.0±20%	1V / 100K	1000	0.73	0.43
SSB1205102MZF	1000.0±20%	1V / 100K	1450	0.60	0.35
SSB1205152MZF	1500.0±20%	1V / 100K	2100	0.48	0.29

RoHS Compliant

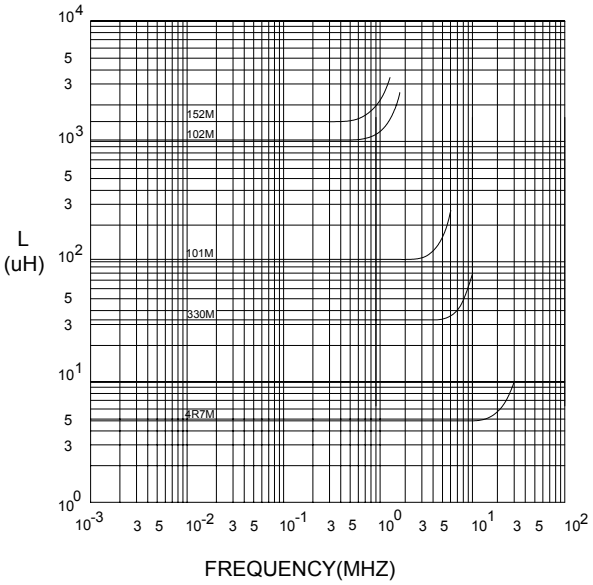
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7. CHARACTERISTICS CURVES :

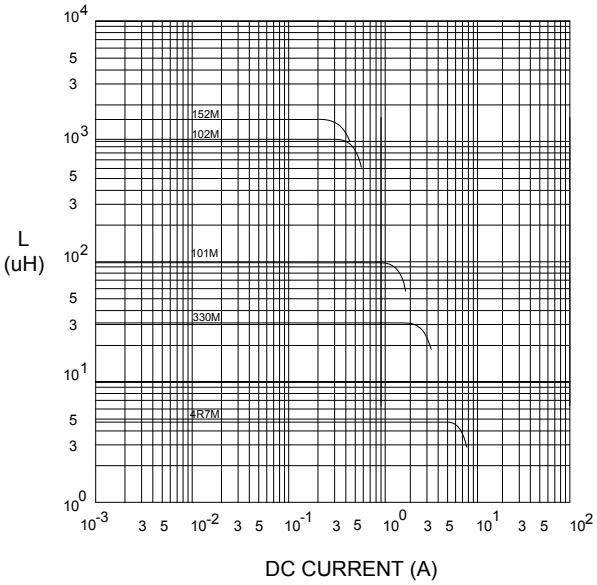
@ TEMP. RISE VS. DC SUPERPOSITION RESPONSE CURVE



@ INDUCTANCE VS. FREQUENCY RESPONSE CURVE



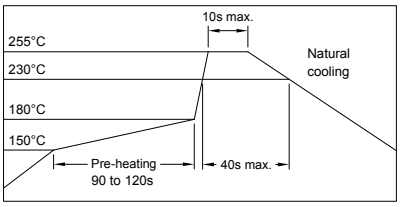
@ INDUCTANCE VS. DC SUPERPOSITION RESPONSE CURVE



RoHS Compliant

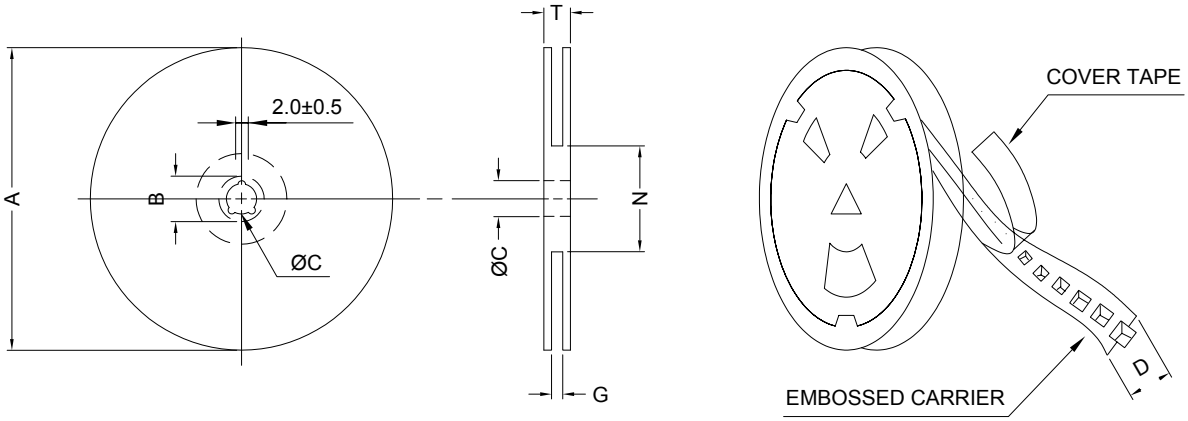
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RECOMMENDED SOLDERING CONDITIONS
REFLOW SOLDERINGS

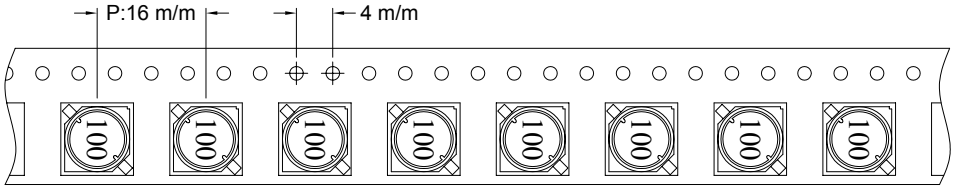


8. PACKAGING INFORMATION :

(1) CONFIGURATION



* CARRIER TAPE WIDTH : D



(2) DIMENSIONS

Unit:m/m

STYLE	A	B	C	D	G	N	T
13-24	330	21±0.8	13	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)
SSB1205	600	1000	13-24	2400	7.5	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

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