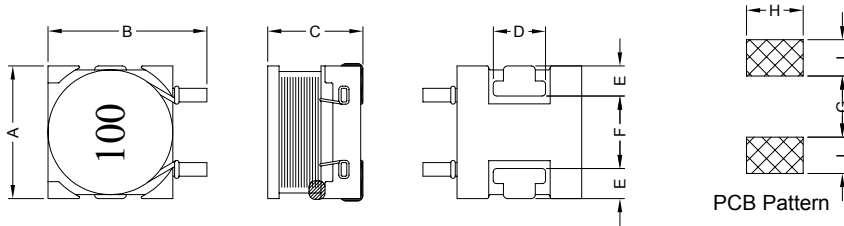


### 1. PART NO. EXPRESSION :

PSB1108-100MZ F  
 (a) (b) (c) (d)(e)(f)

- (a) Series code
- (b) Dimension code
- (c) Inductance code : 1001 = 10.0uH
- (d) Tolerance code : M = ±20%
- (e) X, Y, Z : Standard part
- (f) F : Lead Free

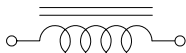
### 2. CONFIGURATION & DIMENSIONS :



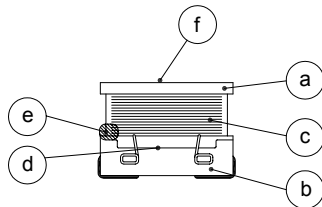
Unit:m/m

A	B	C	D	E	F	G	H	I
11.70 Max.	14.00 Max.	8.40 Max.	4.00 Ref.	2.54 Ref.	6.10 Ref.	5.40 Ref.	5.00 Ref.	3.20 Ref.

### 3. SCHEMATIC :



### 4. MATERIALS :



- (a) Core : DR Ferrite Core
- (b) Base : LCP
- (c) Wire : Enamelled Copper Wire
- (d) Adhesive : Epoxy
- (e) Adhesive : Epoxy
- (f) Ink : Bon Margue

### 5. GENERAL SPECIFICATION :

- a)  $\Delta L/L0A = 5\%$  Max. at Isat
- b) Temp. rise : 40°C Max. at Irms
- 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



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## 6. ELECTRICAL CHARACTERISTICS :

Part No.	Inductance ( $\mu$ H)	Test Frequency (Hz)	RDC ( $\Omega$ ) Max.	I <sub>rms</sub> (A) Max.	I <sub>sat</sub> (A) Max.
PSB1108100MZF	10.0 $\pm$ 20%	1V / 1K	0.06	3.50	6.00
PSB1108120MZF	12.0 $\pm$ 20%	1V / 1K	0.07	3.40	5.60
PSB1108150MZF	15.0 $\pm$ 20%	1V / 1K	0.08	3.10	4.90
PSB1108180MZF	18.0 $\pm$ 20%	1V / 1K	0.09	3.00	4.30
PSB1108220MZF	22.0 $\pm$ 20%	1V / 1K	0.10	2.60	4.10
PSB1108270MZF	27.0 $\pm$ 20%	1V / 1K	0.11	2.40	3.60
PSB1108330MZF	33.0 $\pm$ 20%	1V / 1K	0.12	2.30	3.30
PSB1108390MZF	39.0 $\pm$ 20%	1V / 1K	0.14	2.10	3.00
PSB1108470MZF	47.0 $\pm$ 20%	1V / 1K	0.17	1.95	2.80
PSB1108560MZF	56.0 $\pm$ 20%	1V / 1K	0.19	1.85	2.50
PSB1108680MZF	68.0 $\pm$ 20%	1V / 1K	0.22	1.65	2.30
PSB1108820MZF	82.0 $\pm$ 20%	1V / 1K	0.25	1.50	2.00
PSB1108101MZF	100.0 $\pm$ 20%	1V / 1K	0.35	1.40	1.80
PSB1108121MZF	120.0 $\pm$ 20%	1V / 1K	0.40	1.30	1.70
PSB1108151MZF	150.0 $\pm$ 20%	1V / 1K	0.47	1.20	1.50
PSB1108181MZF	180.0 $\pm$ 20%	1V / 1K	0.63	1.00	1.40
PSB1108221MZF	220.0 $\pm$ 20%	1V / 1K	0.73	0.95	1.30
PSB1108271MZF	270.0 $\pm$ 20%	1V / 1K	0.97	0.90	1.20
PSB1108331MZF	330.0 $\pm$ 20%	1V / 1K	1.15	0.80	1.00
PSB1108391MZF	390.0 $\pm$ 20%	1V / 1K	1.30	0.75	0.96
PSB1108471MZF	470.0 $\pm$ 20%	1V / 1K	1.48	0.65	0.87
PSB1108561MZF	560.0 $\pm$ 20%	1V / 1K	1.90	0.60	0.80
PSB1108681MZF	680.0 $\pm$ 20%	1V / 1K	2.45	0.50	0.73
PSB1108821MZF	820.0 $\pm$ 20%	1V / 1K	2.55	0.48	0.66
PSB1108102MZF	1000.0 $\pm$ 20%	1V / 1K	3.00	0.46	0.60
PSB1108122MZF	1200.0 $\pm$ 20%	1V / 1K	3.50	0.35	0.54



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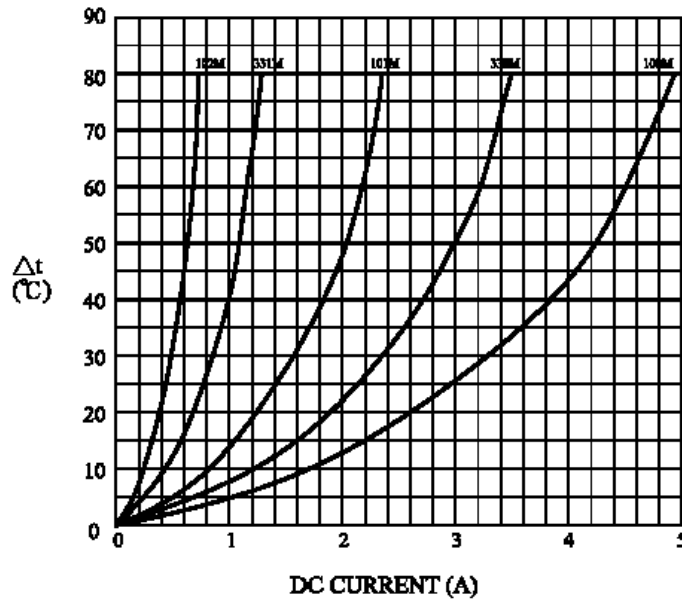
05.05.2008



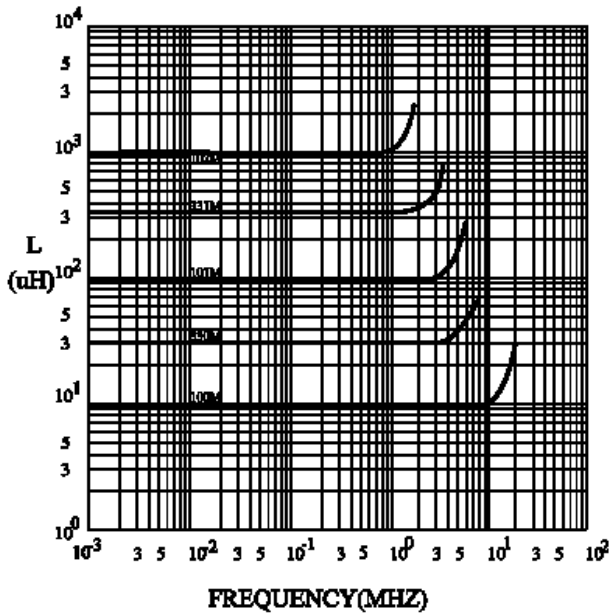
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## 7. CHARACTERISTICS CURVES :

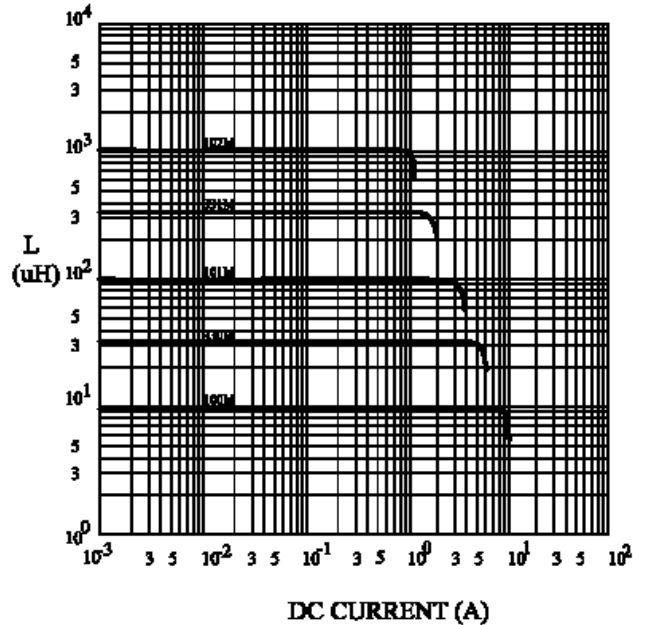
@ TEMP. RISE VS. DC SUPERPOSITION RESPONSE CURVE



@ INDUCTANCE VS. FREQUENCY RESPONSE CURVE



@ INDUCTANCE VS. DC SUPERPOSITION RESPONSE CURVE



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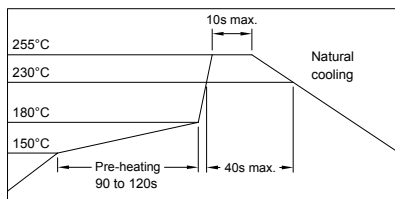
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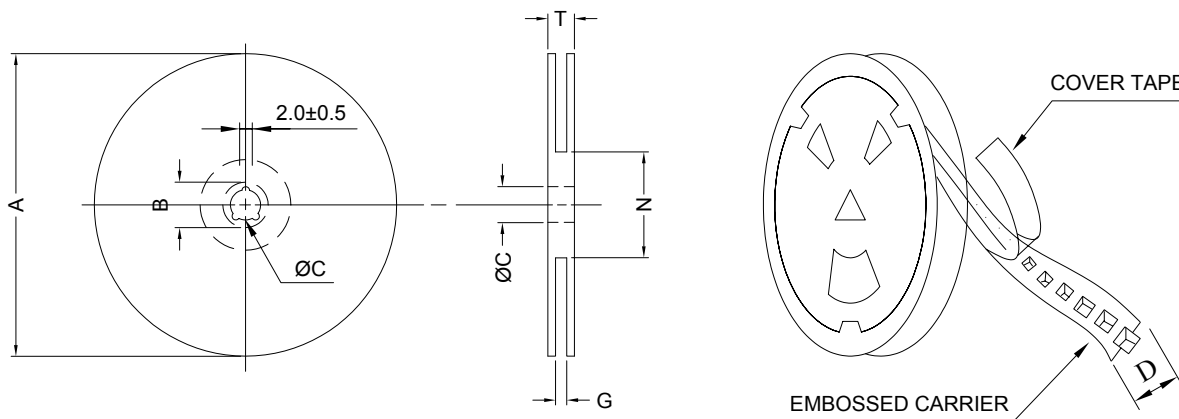
**SUPERWORLD ELECTRONICS (S) PTE LTD**

### RECOMMENDED SOLDERING CONDITIONS REFLOW SOLDERINGS

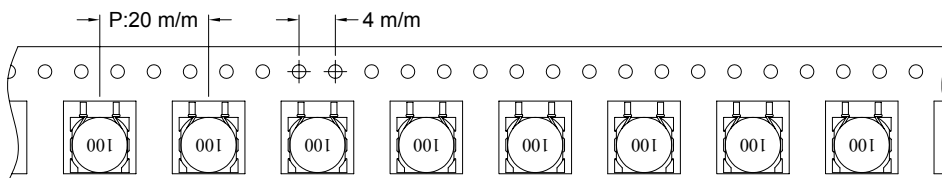


### 8. PACKAGING INFORMATION :

#### ( 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 <sup>+0</sup>	50 <sup>-0</sup>	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)
PSB1108	400	1600	13-24	1600	9.9	40 x 40 x 24



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## 9. RELIABILITY 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.      →      -25±2°C 15 MINUTES                      30 MINUTES
		ROOM TEMP.      →      85±2°C 15 MINUTES                      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



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**SUPERWORLD ELECTRONICS (S) PTE LTD**

**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**

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

**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		H W I	H A I	H V T R	D 4 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.**



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05.05.2008



**SUPERWORLD ELECTRONICS (S) PTE LTD**