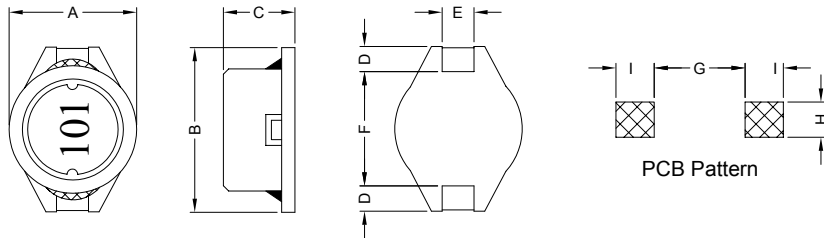


1. PART NO. EXPRESSION :

SDB1005101MZ 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

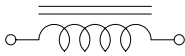
2. CONFIGURATION & DIMENSIONS :



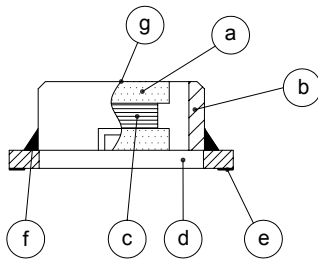
Unit:m/m

A	B	C	D	E	F	G	H	I
10.0±0.2	12.7±0.2	4.9±0.3	2.4±0.2	2.2±0.2	7.6±0.3	7.3 Ref.	2.8 Ref.	3.0 Ref.

3. SCHEMATIC :



4. MATERIALS :



- (a) Core : DR Ferrite Core
- (b) Core : RI Ferrite Core
- (c) Wire : Enamelled Copper Wire
- (d) Base : LCP
- (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



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6. ELECTRICAL CHARACTERISTICS :

Part No.	Inductance (μ H)	Q Ref.	Test Frequency (Hz)	SRF (MHz) Typ.	RDC (m Ω) Max.	IDC (A)
SDB10051R0MZF	1.0 \pm 20%	50	1V/100K	130.0	21	5.00
SDB10051R5MZF	1.5 \pm 20%	60	1V/100K	110.0	22	4.50
SDB10052R2MZF	2.2 \pm 20%	70	1V/100K	90.0	27	3.10
SDB10053R0MZF	3.0 \pm 20%	70	1V/100K	65.0	30	2.90
SDB10054R7MZF	4.7 \pm 20%	70	1V/100K	50.0	40	2.50
SDB10056R8MZF	6.8 \pm 20%	70	1V/100K	30.0	55	2.20
SDB1005100MZF	10.0 \pm 20%	60	1V/100K	28.0	65	2.00
SDB1005120MZF	12.0 \pm 20%	60	1V/100K	25.0	80	1.80
SDB1005150MZF	15.0 \pm 20%	60	1V/100K	20.0	85	1.70
SDB1005180LZF	18.0 \pm 15%	60	1V/100K	19.0	90	1.60
SDB1005220LZF	22.0 \pm 15%	50	1V/100K	18.0	100	1.40
SDB1005270LZF	27.0 \pm 15%	50	1V/100K	16.0	120	1.30
SDB1005330LZF	33.0 \pm 15%	70	1V/100K	14.0	160	1.20
SDB1005390LZF	39.0 \pm 15%	70	1V/100K	12.0	180	1.05
SDB1005470LZF	47.0 \pm 15%	70	1V/100K	11.0	190	1.00
SDB1005560LZF	56.0 \pm 15%	70	1V/100K	10.0	210	0.90
SDB1005680LZF	68.0 \pm 15%	85	1V/100K	9.0	340	0.82
SDB1005820LZF	82.0 \pm 15%	85	1V/100K	8.0	380	0.75
SDB1005101KZF	100.0 \pm 10%	85	1V/100K	7.5	420	0.68
SDB1005121KZF	120.0 \pm 10%	90	1V/100K	7.0	460	0.60
SDB1005151KZF	150.0 \pm 10%	90	1V/100K	6.3	520	0.55
SDB1005181KZF	180.0 \pm 10%	100	1V/100K	5.5	700	0.50
SDB1005221KZF	220.0 \pm 10%	100	1V/100K	5.0	800	0.45
SDB1005271KZF	270.0 \pm 10%	100	1V/100K	4.5	1100	0.40
SDB1005331KZF	330.0 \pm 10%	110	1V/100K	4.0	1200	0.35
SDB1005391KZF	390.0 \pm 10%	110	1V/100K	3.8	1400	0.33
SDB1005471KZF	470.0 \pm 10%	70	1V/100K	3.0	1600	0.30
SDB1005561KZF	560.0 \pm 10%	70	1V/100K	2.7	1800	0.28
SDB1005681KZF	680.0 \pm 10%	70	1V/100K	2.6	2300	0.26
SDB1005821KZF	820.0 \pm 10%	70	1V/100K	2.5	2600	0.24
SDB1005102KZF	1000.0 \pm 10%	70	1V/100K	2.0	3200	0.22
SDB1005122KZF	1200.0 \pm 10%	70	1V/100K	2.0	3600	0.20
SDB1005152KZF	1500.0 \pm 10%	70	1V/100K	1.6	5200	0.17
SDB1005182KZF	1800.0 \pm 10%	70	1V/100K	1.4	5700	0.16
SDB1005222KZF	2200.0 \pm 10%	70	1V/100K	1.4	6500	0.14
SDB1005272KZF	2700.0 \pm 10%	70	1V/100K	1.2	8600	0.12
SDB1005332KZF	3300.0 \pm 10%	70	1V/100K	1.2	10000	0.10

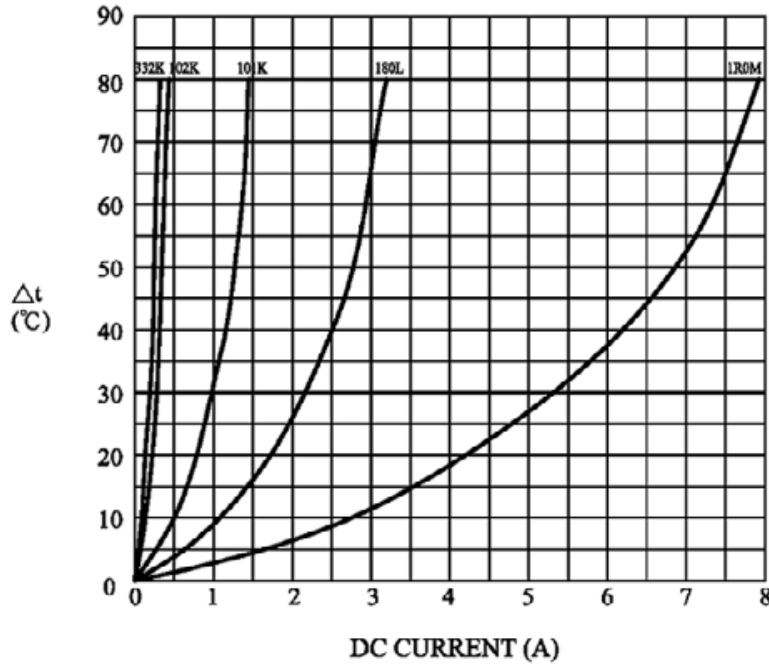
NOTE : Specifications subject to change without notice. Please check our website for latest information.

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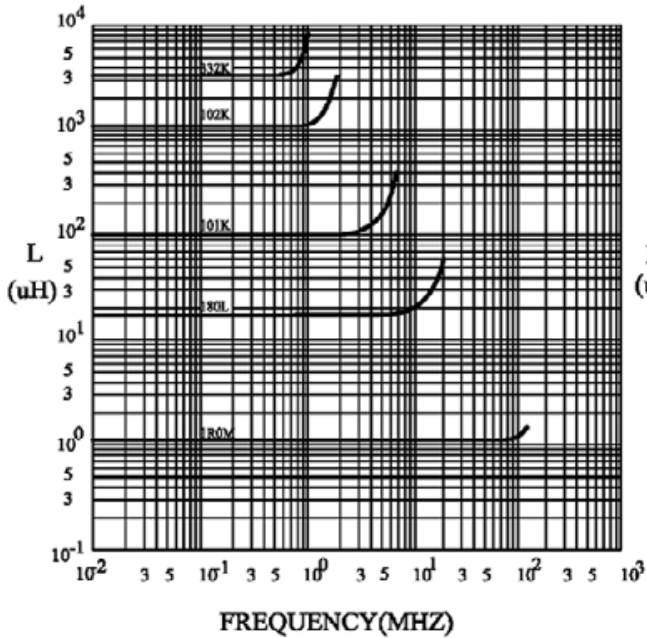


6. ELECTRICAL CHARACTERISTICS :

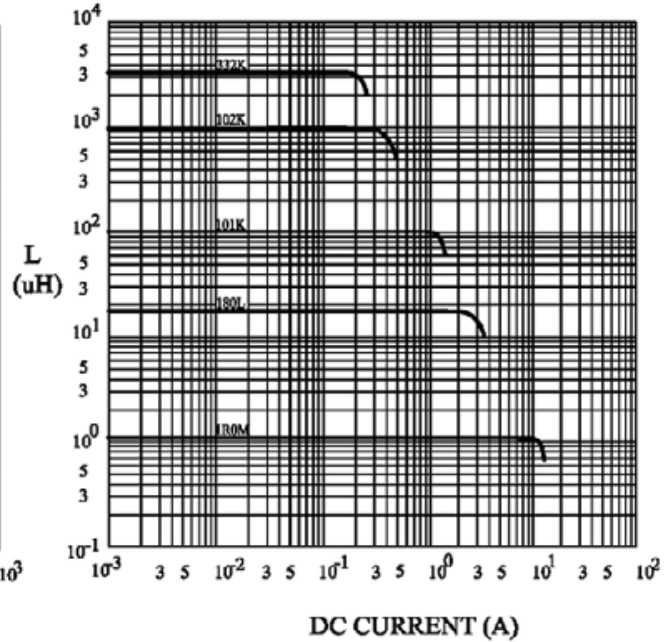
@ TEMP. RISE VS. DC SUPERPOSITION RESPONSE CURVE



@ INDUCTANCE VS. FREQUENCY RESPONSE CURVE



@ INDUCTANCE VS. DC SUPERPOSITION RESPONSE CURVE



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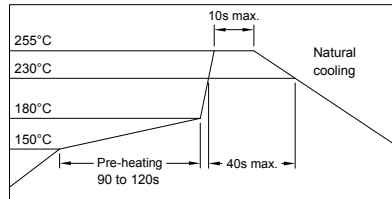
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05.05.2008



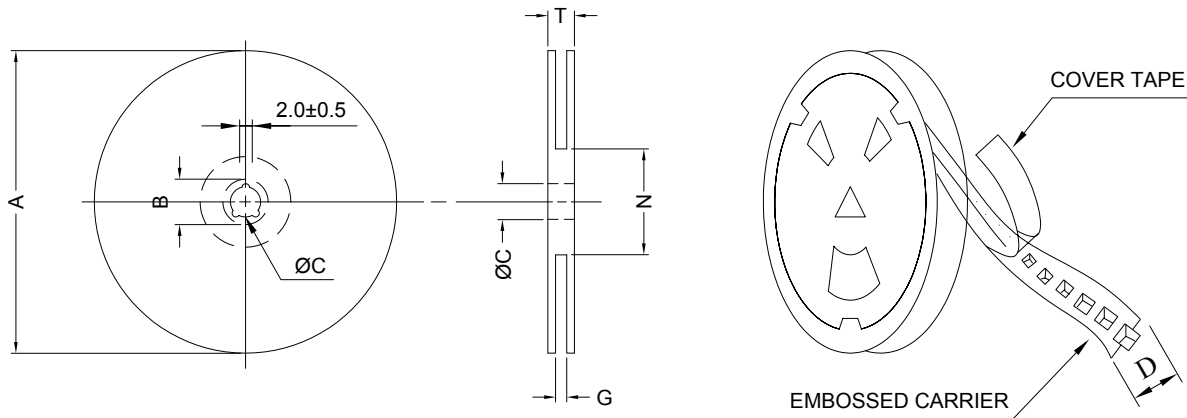
SUPERWORLD ELECTRONICS (S) PTE LTD

RECOMMENDED SOLDERING CONDITIONS REFLOW SOLDERINGS

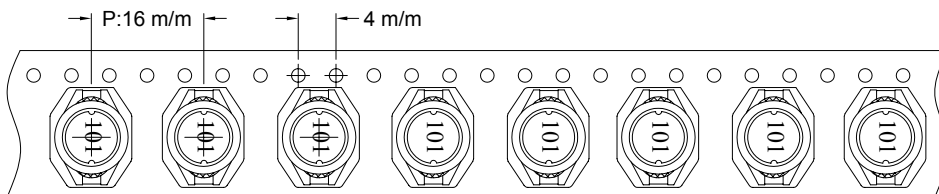


7. PACKAGING INFORMATION :

(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)
SDB1005	600	1100	13-24	2400	7.9	40 x 40 x 24



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8. 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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9. 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	BC	Coating Type	TC	ANSI 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	w/o Imp	H W I	H A I	H V R	D 4 5	C T I
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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