

1. PART NO. EXPRESSION :

S D B 1 2 0 5 1 R 5 Y Z F
(a) (b) (c) (d)(e)(f)

(a) Series code

(b) Dimension code

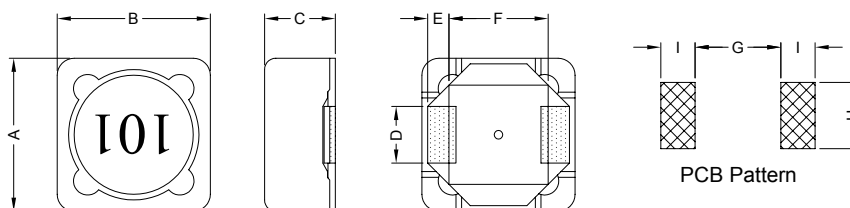
(c) Inductance code : 1R5 = 1.5uH

(d) Tolerance code : M = $\pm 20\%$, Y = $\pm 25\%$

(e) X, Y, Z : Standard part

(f) F : Lead Free

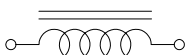
2. CONFIGURATION & DIMENSIONS :



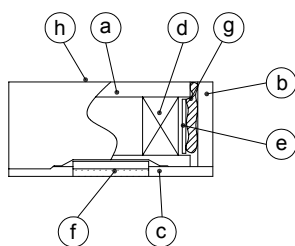
Unit:m/m

A	B	C	D	E	F	G	H	I
12.5 $\pm$ 0.3	12.5 $\pm$ 0.3	6.00 Max.	5.0 $\pm$ 0.2	2.2 $\pm$ 0.2	7.6 $\pm$ 0.2	7.0 Ref.	5.4 Ref.	2.8 Ref.

3. SCHEMATIC :



4. MATERIALS :



(a) Core : DR Ferrite Core

(b) Core : SI Ferrite Core

(c) Base : LCP

(d) Wire : Enamelled Copper Wire

(e) Tape : Mylar Tape

(f) Terminal : Tinned Copper Plate

(g) Adhesive : Epoxy

(h) Ink : Bon Margue

5. GENERAL SPECIFICATION :

a) Temp. rise : 40°C Max.

b) Rated current : Base on temp. rise & $\Delta L/L0A = 20\%$ Max.

c) Storage temp. : -40°C to +125°C

d) Operating temp. : -40°C to +80°C

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



RoHS Compliant

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

07.05.2008



SUPERWORLD ELECTRONICS (S) PTE LTD

6. ELECTRICAL CHARACTERISTICS :

Part No.	Inductance (μ H)	Test Frequency (Hz)	RDC (m Ω) Max.	IDC (A) Max.
SDB12051R5YZF	1.5 $\pm$ 25%	1V / 100K	12	8.00
SDB12052R2YZF	2.2 $\pm$ 25%	1V / 100K	14	7.00
SDB12053R1YZF	3.1 $\pm$ 25%	1V / 100K	17	6.00
SDB12054R4YZF	4.4 $\pm$ 25%	1V / 100K	20	5.00
SDB12055R2YZF	5.2 $\pm$ 25%	1V / 100K	21	4.40
SDB12057R5YZF	7.5 $\pm$ 25%	1V / 100K	24	4.20
SDB1205100MZF	10.0 $\pm$ 20%	1V / 1K	25	4.00
SDB1205120MZF	12.0 $\pm$ 20%	1V / 1K	27	3.50
SDB1205150MZF	15.0 $\pm$ 20%	1V / 1K	30	3.30
SDB1205180MZF	18.0 $\pm$ 20%	1V / 1K	34	3.00
SDB1205220MZF	22.0 $\pm$ 20%	1V / 1K	36	2.80
SDB1205270MZF	27.0 $\pm$ 20%	1V / 1K	51	2.30
SDB1205330MZF	33.0 $\pm$ 20%	1V / 1K	57	2.10
SDB1205390MZF	39.0 $\pm$ 20%	1V / 1K	68	2.00
SDB1205470MZF	47.0 $\pm$ 20%	1V / 1K	75	1.80
SDB1205560MZF	56.0 $\pm$ 20%	1V / 1K	110	1.70
SDB1205680MZF	68.0 $\pm$ 20%	1V / 1K	120	1.50
SDB1205820MZF	82.0 $\pm$ 20%	1V / 1K	140	1.40
SDB1205101MZF	100.0 $\pm$ 20%	1V / 1K	160	1.30
SDB1205121MZF	120.0 $\pm$ 20%	1V / 1K	170	1.10
SDB1205151MZF	150.0 $\pm$ 20%	1V / 1K	230	1.00
SDB1205181MZF	180.0 $\pm$ 20%	1V / 1K	290	0.90
SDB1205221MZF	220.0 $\pm$ 20%	1V / 1K	400	0.80
SDB1205271MZF	270.0 $\pm$ 20%	1V / 1K	460	0.75
SDB1205331MZF	330.0 $\pm$ 20%	1V / 1K	510	0.68
SDB1205391MZF	390.0 $\pm$ 20%	1V / 1K	690	0.65
SDB1205471MZF	470.0 $\pm$ 20%	1V / 1K	770	0.58
SDB1205561MZF	560.0 $\pm$ 20%	1V / 1K	860	0.54
SDB1205681MZF	680.0 $\pm$ 20%	1V / 1K	1200	0.48
SDB1205821MZF	820.0 $\pm$ 20%	1V / 1K	1340	0.43
SDB1205102MZF	1000.0 $\pm$ 20%	1V / 1K	1530	0.40



RoHS Compliant

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

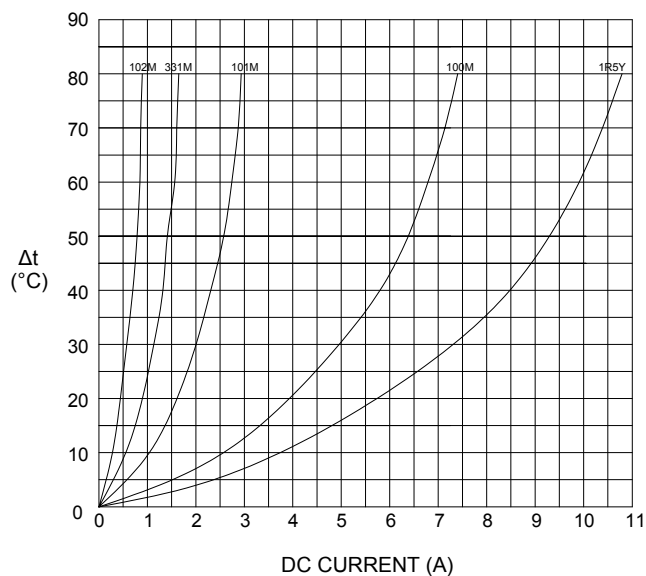
07.05.2008



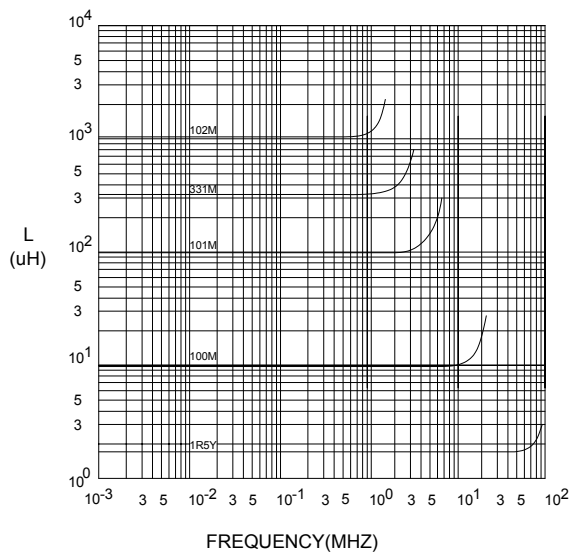
SUPERWORLD ELECTRONICS (S) PTE LTD

7. CHARACTERISTICS CURVES :

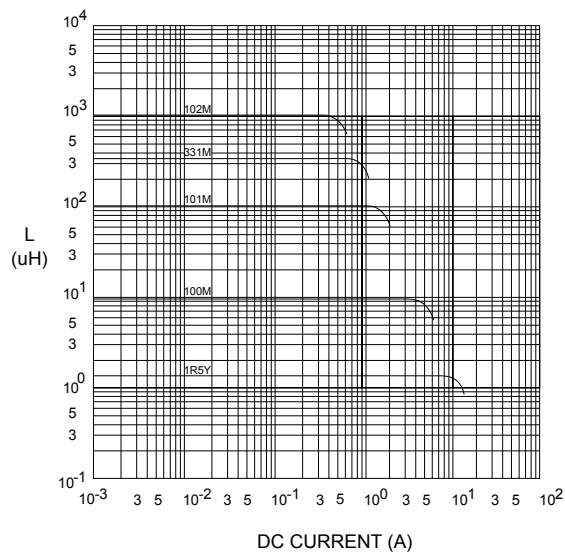
@ TEMP. RISE VS. DC SUPERPOSITION RESPONSE CURVE



@ INDUCTANCE VS. FREQUENCY RESPONSE CURVE



@ INDUCTANCE VS. DC SUPERPOSITION RESPONSE CURVE



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



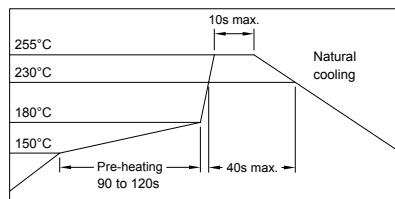
RoHS Compliant

07.05.2008



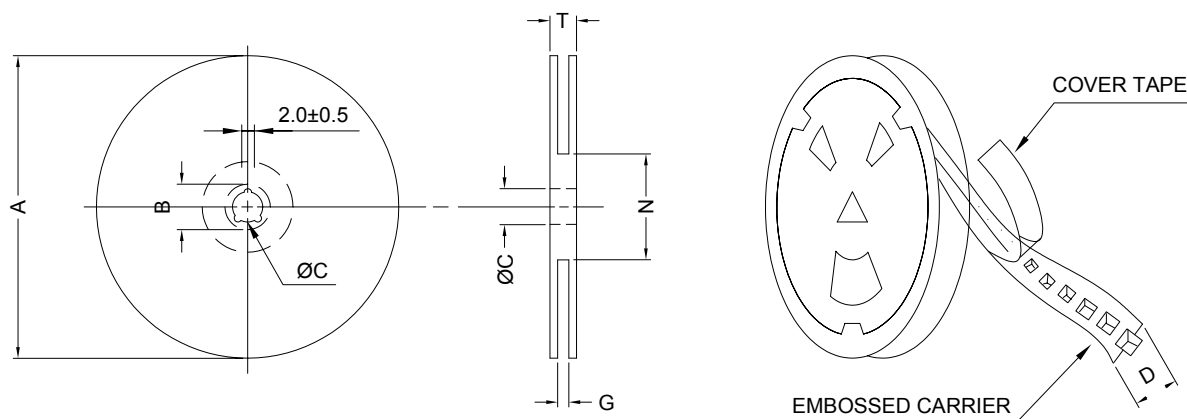
SUPERWORLD ELECTRONICS (S) PTE LTD

RECOMMENDED SOLDERING CONDITIONS REFLOW SOLDERINGS

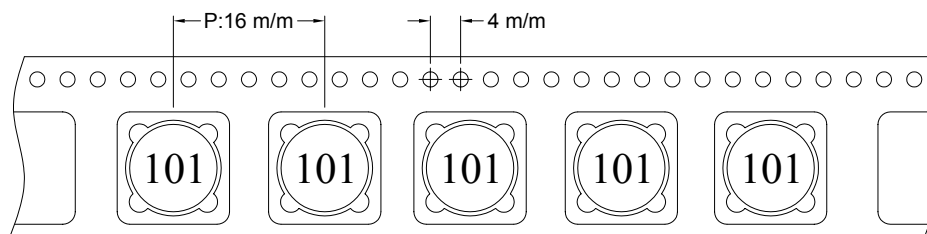


8. PACKAGING INFORMATION :

(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±0.5	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)
SDB1205	600	1900	13-24	2400	11.1	40 x 40 x 24



RoHS Compliant

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

07.05.2008



SUPERWORLD ELECTRONICS (S) PTE LTD

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



RoHS Compliant

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

07.05.2008



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		ANSI Type	TI
	BC	TC		
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		H W I	H A I	H V T R	D 4 9 5	C T I
					Mech with Imp	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.



RoHS Compliant

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

07.05.2008



SUPERWORLD ELECTRONICS (S) PTE LTD

PG. 6

10. UL CARD :

TERAOKA SEISAKUSHO CO LTD
4-22 1-CHOME HIROMACHI SHINAGAWA-KU, TOKYO
JAPAN E56086 (S)

Flame retardant aramid paper tape, Cat. Nos. 512F+, 560F+, 565S+, 681S+.
Flame retardant aramid paper tape, Cat. Nos. 560S+, 561S+, 562S+, rated 200 C.
Flame retardant acetate cloth tape, Cat. Nos. 570F+, 571F+, 573F+.
Flame retardant polyester film tape, Cat. Nos. 680F+, 684F+.
Flame retardant glass cloth tape, Cat. Nos. 510F+, 540S+, 541F+, 685S+.
Flame retardant glass cloth tape, Cat. No. 54S, rated 200 C.
Flame retardant cotton cloth tape, Cat. Nos. 590F+, 715F+.
Flame retardant polyimide film tape, Cat. No. 650S+, rated 200 C.
Flame retardant tellon tape, Cat. Nos. 841+, 846+.
Flame retardant PVC tape, Cat. Nos. 305F+, 307F+, 380F+.
Flame retardant polyester fiber tape, Cat. Nos. 511F+, 551F+.
Flame retardant epoxy varnish impregnated polyester web tape, Cat. Nos. 530F+.
Flame retardant epoxy varnish impregnated glass paper tape, Cat. No. 531F+.
Flame retardant copper foil tape, Cat. No. 831S+.
Flame retardant copper foil tape, Cat. No. 8321+.
Flame retardant aluminum foil tape, Cat. Nos. 833+, 834+.
Epoxy varnish impregnated polyester non-woven fabric tape, cat. no. 530F° rated 150 C.
polyester film tape, Cat. Nos. 631S°, 632S, rated 130 C.
Flame retardant polyester film tape, Cat. No. 630F°, rated 130 C.
Flame retardant polyester film/epoxy varnish impregnated polyester fiber tape Cat. No. 673F°, rated 130 C.
Flame retardant polyester film/epoxy varnish impregnated polyester fiber/polyester film tape, Cat. No. 850F°, rated 130 C.
+ - Subjected to Flame Retardant tests only.
° - Complies with Flame Retardant requirements when so marked.
Marking: Company name or "E56086" and catalog designation and "Flame Retardant" if apply, bie. printed on the central paper or outer package.

OANZ2 August 7, 1989
Component-Insulating Tape
FOUR PILLARS ENTERPRISE CO LTD E50292 (S)
NO 18 HENGYANG RD , TAIPEI TAIWAN (A card)

Flame retardant polyvinyl chloride tape, Cat. No. 33047+.
Polyester film tape, Cat. No. 35660° rated 130C.
Flame retardant double sided acrylic tape, Cat. No. DS31+.
Arme paper tape, Cat. No. NM130° rated 155C.
Glass cloth backing with silicone adhesive, Cat. No. GL06° rated 180C.
Glass cloth backing with acrylic adhesive, Cat. No. GL15 rated 155C.
Glass cloth backing with rubber adhesive, Cat. No. GL27 rated 130C.
Polyesterfilm insulating tape with acrylic adhesive, Cat. No. MY130 rated 130C.
Polyesterfilm insulating tape with silicone base adhesive, Cat. No. KA180° rated 180C.
Acetate cloth backing with acrylic base adhesive, Cat. No. AC0 rated 130C.

Reports: March 25, 1985; March 26, 1985; March 27, 1985; March 7, 1986; July 2, 1987;
July 2, 1987; July 2, 1987; March 9, 1989; March 10, 1989; August 15, 1989.

Replaces E50292A dated February 28, 1989.
369021002 Underwriters Laboratories Inc.® (Cont. on B card)
D11/0114874
51



RoHS Compliant

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

07.05.2008



SUPERWORLD ELECTRONICS (S) PTE LTD

PG. 7



ООО «НИОКРсистемс» - это оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов. Реализуемая нашей компанией продукция насчитывает более полумиллиона наименований.

Благодаря этому наша компания предлагает к поставке практически не ограниченный ассортимент компонентов как оптовыми, мелкооптовыми партиями, так и в розницу.

Благодаря развитой сети поставщиков, помогаем в поиске и приобретении экзотичных или снятых с производства компонентов.

Наша компания это:

- Гарантия качества поставляемой продукции
- Широкий ассортимент
- Минимальные сроки поставок
- Техническая поддержка
- Подбор комплектации
- Индивидуальный подход
- Гибкое ценообразование
- Работаем по 275 ФЗ