

1. PART NO. EXPRESSION :

PSB07031R0MZ F

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

(a) Series code

(b) Dimension code

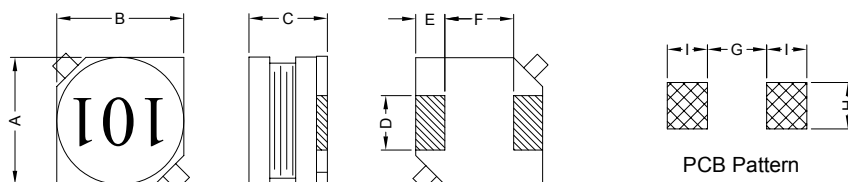
(c) Inductance code : 1R0 = 1.0uH

(d) Tolerance code : K = $\pm 10\%$, M = $\pm 20\%$

(e) X, Y, Z : Standard part

(f) F : Lead Free

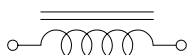
2. CONFIGURATION & DIMENSIONS :



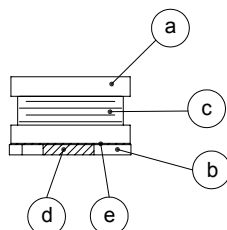
Unit:m/m

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

3. SCHEMATIC :



4. MATERIALS :



(a) Core : DR Ferrite Core

(b) Base : LCP

(c) Wire : Enamelled Copper Wire

(d) Terminal : Tinned Copper Plate

(e) Adhesive : Epoxy

5. GENERAL SPECIFICATION :

- a) Temp. rise : 40°C Max.
- b) Rated current : Base on temp. rise & $\Delta L/L0A = 10\%$ 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)	Test Frequency (Hz)	RDC (m Ω) Max.	IDC (A) Max.
PSB07031R0MZ	1.0 $\pm$ 20%	1V / 100K	20	3.20
PSB07031R5MZ	1.5 $\pm$ 20%	1V / 100K	25	2.80
PSB07032R2MZ	2.2 $\pm$ 20%	1V / 100K	35	2.50
PSB07033R3MZ	3.3 $\pm$ 20%	1V / 100K	40	2.20
PSB07034R7MZ	4.7 $\pm$ 20%	1V / 100K	45	2.00
PSB07036R8MZ	6.8 $\pm$ 20%	1V / 100K	60	1.60
PSB0703100MZ	10.0 $\pm$ 20%	1V / 100K	80	1.40
PSB0703120MZ	12.0 $\pm$ 20%	1V / 100K	85	1.30
PSB0703150LZ	15.0 $\pm$ 15%	1V / 100K	110	1.10
PSB0703180LZ	18.0 $\pm$ 15%	1V / 100K	130	1.05
PSB0703220LZ	22.0 $\pm$ 15%	1V / 100K	150	1.00
PSB0703270LZ	27.0 $\pm$ 15%	1V / 100K	190	0.95
PSB0703330LZ	33.0 $\pm$ 15%	1V / 100K	210	0.85
PSB0703390LZ	39.0 $\pm$ 15%	1V / 100K	270	0.75
PSB0703470LZ	47.0 $\pm$ 15%	1V / 100K	310	0.70
PSB0703560KZ	56.0 $\pm$ 10%	1V / 100K	390	0.65
PSB0703680KZ	68.0 $\pm$ 10%	1V / 100K	430	0.60
PSB0703820KZ	82.0 $\pm$ 10%	1V / 100K	490	0.50
PSB0703101KZ	100.0 $\pm$ 10%	1V / 100K	650	0.45
PSB0703121KZ	120.0 $\pm$ 10%	1V / 100K	700	0.40
PSB0703151KZ	150.0 $\pm$ 10%	1V / 100K	850	0.35
PSB0703181KZ	180.0 $\pm$ 10%	1V / 100K	1100	0.33
PSB0703221KZ	220.0 $\pm$ 10%	1V / 100K	1250	0.30
PSB0703271KZ	270.0 $\pm$ 10%	1V / 100K	1450	0.28
PSB0703331KZ	330.0 $\pm$ 10%	1V / 100K	2000	0.25
PSB0703391KZ	390.0 $\pm$ 10%	1V / 100K	2250	0.23
PSB0703471KZ	470.0 $\pm$ 10%	1V / 100K	2600	0.22
PSB0703561KZ	560.0 $\pm$ 10%	1V / 100K	3700	0.20
PSB0703681KZ	680.0 $\pm$ 10%	1V / 100K	4300	0.18
PSB0703821KZ	820.0 $\pm$ 10%	1V / 100K	4900	0.16
PSB0703102KZ	1000.0 $\pm$ 10%	1V / 100K	5600	0.15



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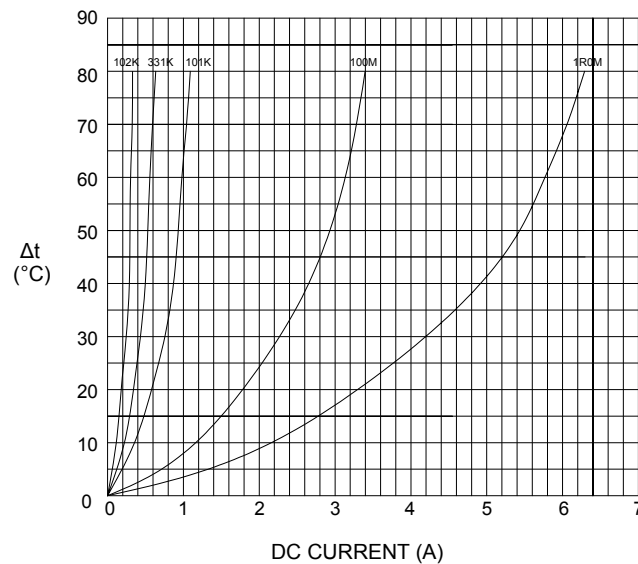
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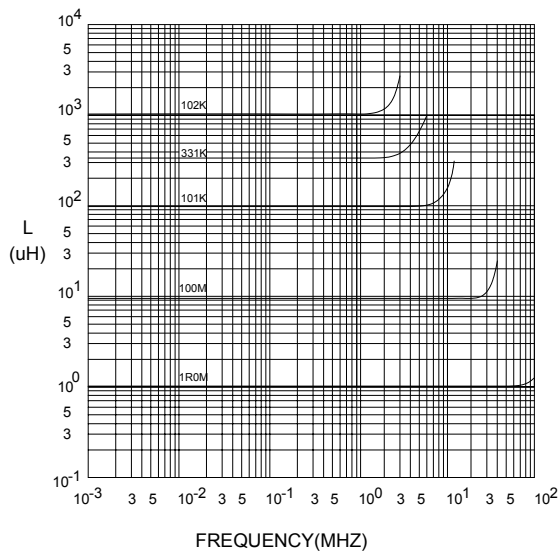
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7. CHARACTERISTICS CURVES :

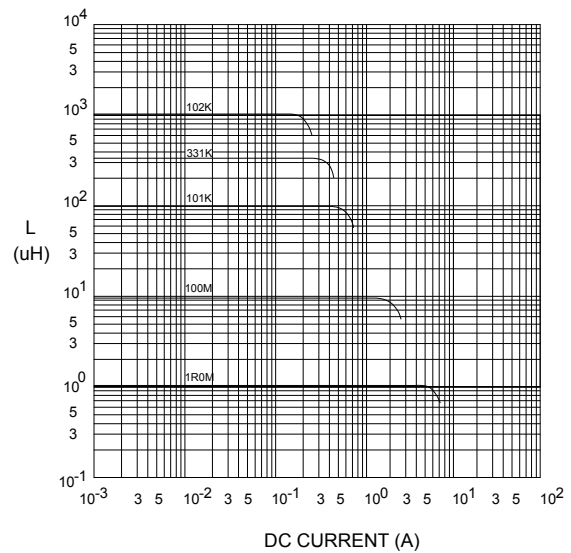
@ TEMP. RISE VS. DC SUPERPOSITION RESPONSE CURVE



@ INDUCTANCE VS. FREQUENCY RESPONSE CURVE



@ INDUCTANCE VS. DC SUPERPOSITION RESPONSE CURVE



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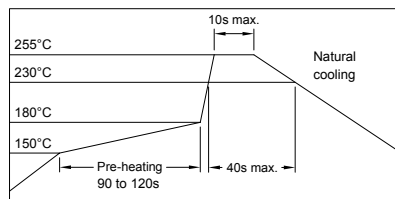
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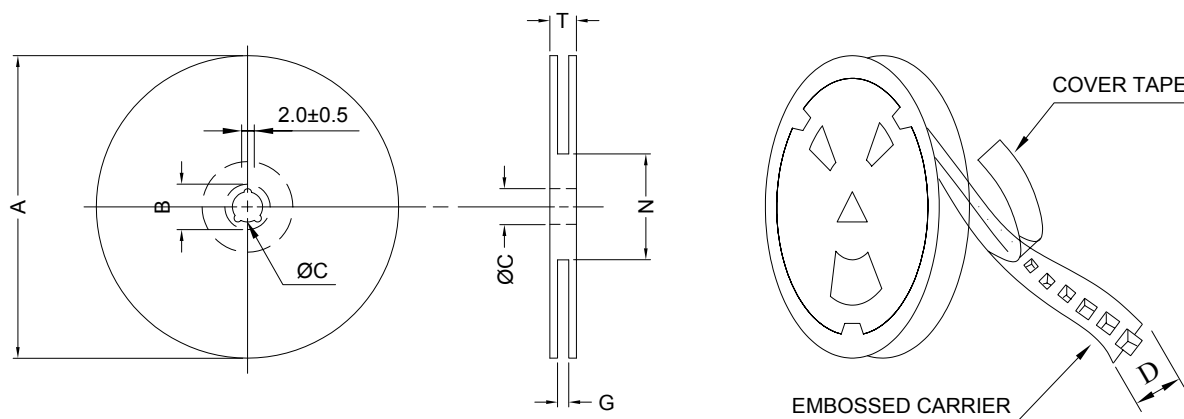
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RECOMMENDED SOLDERING CONDITIONS REFLOW SOLDERINGS

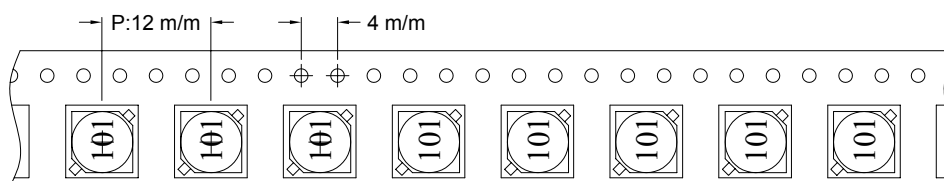


8. PACKAGING INFORMATION :

(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)
PSB0703	1000	600	13-16	6000	7.1	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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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	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		w/o Imp	H W I	H A I	H V T R	D 4 9 5	C T I
					with Imp	Mech						
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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