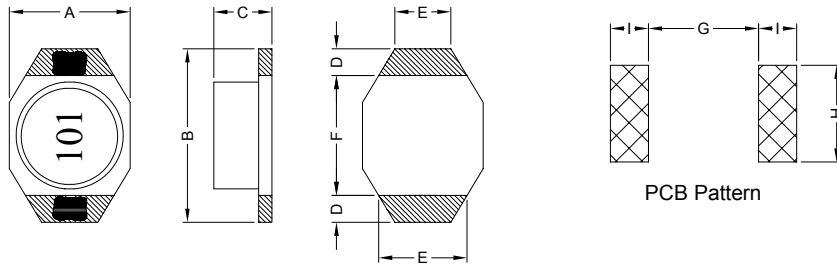


1. PART NO. EXPRESSION :

SDB16081R0MZ F
 (a) (b) (c) (d)(e)(f)

- (a) Series code
- (b) Dimension code
- (c) Inductance code : 1R0 = 1.0uH
- (d) Tolerance code : K = ±10%, M = ±20%
- (e) X, Y, Z : Standard part
- (f) F : Lead Free

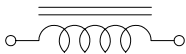
2. CONFIGURATION & DIMENSIONS :



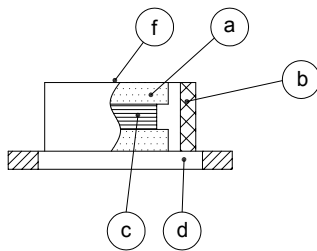
Unit:m/m

| A | B | C | D | E | E' | F | G | H | I |
|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 4.45 Max. | 6.60 Max. | 2.92 Max. | 1.02 Ref. | 3.05 Ref. | 1.27 Ref. | 4.32 Ref. | 4.06 Ref. | 3.56 Ref. | 1.40 Ref. |

3. SCHEMATIC :



4. MATERIALS :



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

5. GENERAL SPECIFICATION :

- a) Temp. rise : 30°C Typ. at Irms
- b) ΔL/LOA = 30% Typ. at Isat
- c) Storage temp. : -40°C to +125°C
- d) Operating temp. : -40°C to +95°C
- e) Resistance to solder heat : 260°C.10 secs



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

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6. ELECTRICAL CHARACTERISTICS :

| Part No. | Inductance (μ H) | Test Frequency (Hz) | Q Min. | Test Frequency (Hz) | SRF (MHz) Typ. | RDC (Ω) Max. | I _{rms} (A) |
|---------------|--------------------------|---------------------------|-----------|---------------------------|----------------------|-----------------------------|-------------------------|
| SDB16081R0MZF | 1.0 \pm 20% | 100K | 30 | 200K | 250 | 0.040 | 3.0 |
| SDB16081R5MZF | 1.5 \pm 20% | 100K | 30 | 200K | 125 | 0.045 | 2.8 |
| SDB16082R2MZF | 2.2 \pm 20% | 100K | 40 | 200K | 120 | 0.050 | 1.8 |
| SDB16083R3MZF | 3.3 \pm 20% | 100K | 40 | 200K | 120 | 0.055 | 1.6 |
| SDB16084R7MZF | 4.7 \pm 20% | 100K | 40 | 200K | 105 | 0.060 | 1.4 |
| SDB16086R8MZF | 6.8 \pm 20% | 100K | 40 | 200K | 50 | 0.065 | 1.2 |
| SDB1608100MZF | 10.0 \pm 20% | 100K | 40 | 200K | 38 | 0.075 | 1.0 |
| SDB1608150MZF | 15.0 \pm 20% | 100K | 40 | 100K | 33 | 0.090 | 0.80 |
| SDB1608220MZF | 22.0 \pm 20% | 100K | 40 | 100K | 25 | 0.110 | 0.70 |
| SDB1608330MZF | 33.0 \pm 20% | 100K | 40 | 100K | 20 | 0.190 | 0.60 |
| SDB1608470MZF | 47.0 \pm 20% | 100K | 40 | 100K | 20 | 0.230 | 0.50 |
| SDB1608680MZF | 68.0 \pm 20% | 100K | 40 | 100K | 15 | 0.290 | 0.40 |
| SDB1608101KZF | 100.0 \pm 10% | 100K | 40 | 100K | 10 | 0.480 | 0.30 |
| SDB1608151KZF | 150.0 \pm 10% | 100K | 40 | 100K | 9 | 0.590 | 0.26 |
| SDB1608221KZF | 220.0 \pm 10% | 100K | 40 | 100K | 6 | 0.770 | 0.22 |
| SDB1608331KZF | 330.0 \pm 10% | 100K | 40 | 100K | 5 | 1.400 | 0.20 |
| SDB1608471KZF | 470.0 \pm 10% | 100K | 40 | 100K | 4 | 1.800 | 0.19 |
| SDB1608681KZF | 680.0 \pm 10% | 100K | 40 | 100K | 3 | 2.200 | 0.18 |
| SDB1608102KZF | 1000.0 \pm 10% | 100K | 40 | 100K | 2 | 3.400 | 0.15 |
| SDB1608152KZF | 1500.0 \pm 10% | 100K | 50 | 100K | 2 | 4.200 | 0.12 |
| SDB1608222KZF | 2200.0 \pm 10% | 100K | 50 | 100K | 2 | 8.500 | 0.10 |
| SDB1608332KZF | 3300.0 \pm 10% | 100K | 50 | 100K | 1 | 11.000 | 0.08 |
| SDB1608472KZF | 4700.0 \pm 10% | 100K | 50 | 100K | 1 | 13.900 | 0.06 |
| SDB1608682KZF | 6800.0 \pm 10% | 100K | 50 | 100K | 1 | 25.000 | 0.04 |
| SDB1608103KZF | 10000.0 \pm 10% | 100K | 50 | 100K | 0.8 | 32.800 | 0.02 |



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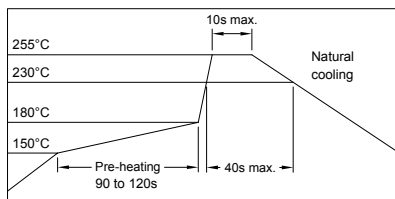
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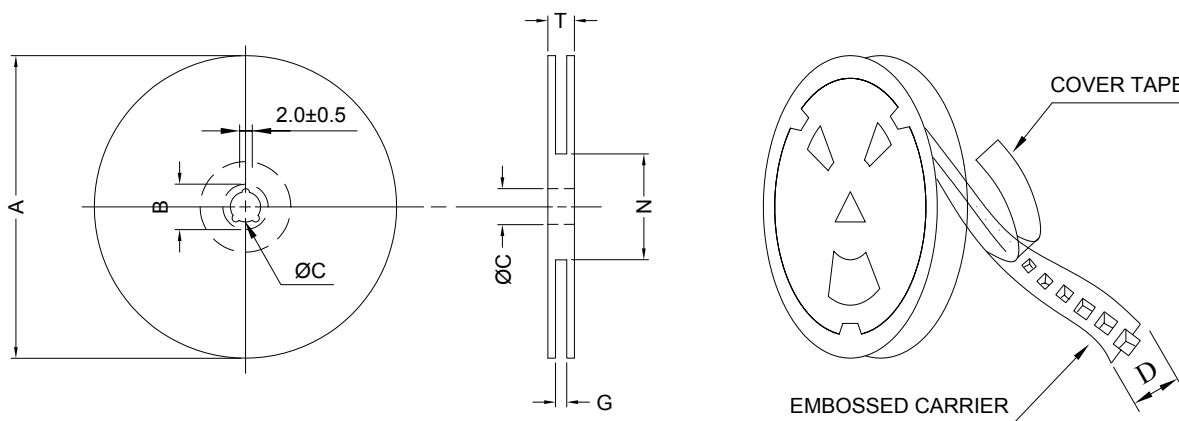
PG. 2

RECOMMENDED SOLDERING CONDITIONS REFLOW SOLDERINGS

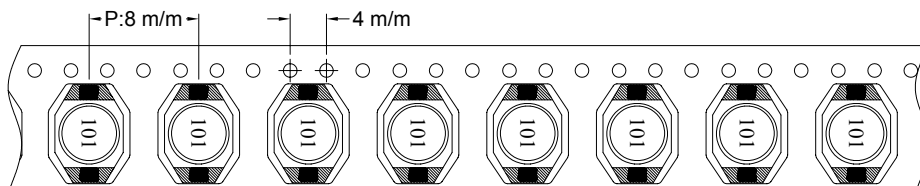


7. PACKAGING INFORMATION :

(1) CONFIGURATION



* CARRIER TAPE WIDTH : D



(2) DIMENSIONS

Unit:m/m

| STYLE | A | B | C | D | G | N | T |
|-------|-----|--------|----|----|------------------|------------------|------|
| 13-16 | 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) |
| SDB1608 | 2000 | 900 | 13-16 | 18000 | 8.9 | 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 |

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 | | | | |
| | Coating Type | | ANSI Type | TI |
| Mtl Dsg | 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 | |



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