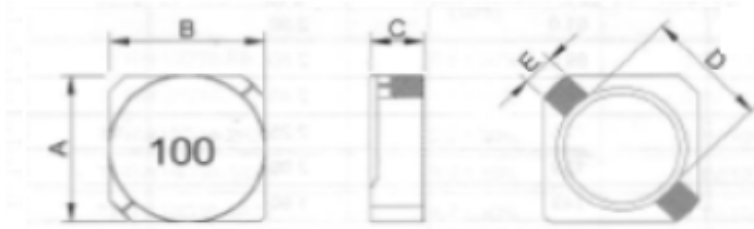


1. Features

- 1.Low profile very effective in space-conscious applications.
- 2.Low resistance and high energy storage.

2. Dimension



| Series | A(mm) | B(mm) | C(mm) | D(mm) | E(mm) |
|---------|--------|--------|--------|--------|--------|
| SSL2D18 | 3.2MAX | 3.2MAX | 2.0MAX | 2.1REF | 1.0REF |

Units: mm

3. Part Numbering

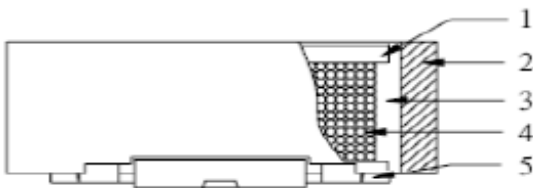


A:Series
 B:Dimension Ax C
 C:Inductance 100=10uH
 D:Inductance Tolerance M=± 20%, Y=± 30%

4.Specification

| Part Number | Inductance (uH) | Test Frequency (Hz) | DCR (Ω) MAX | l rms (A) | l sat (A) |
|--------------|-----------------|---------------------|-------------|-----------|-----------|
| SSL2D18-2R2Y | 2.2±30% | 0.1V/100K | 0.041 | 0.85 | 2.30 |
| SSL2D18-3R3Y | 3.3±30% | 0.1V/100K | 0.054 | 0.75 | 2.10 |
| SSL2D18-4R7Y | 4.7±30% | 0.1V/100K | 0.078 | 0.63 | 1.65 |
| SSL2D18-6R8Y | 6.8±30% | 0.1V/100K | 0.106 | 0.52 | 1.32 |
| SSL2D18-100Y | 10.0±30% | 0.1V/100K | 0.180 | 0.43 | 1.00 |
| SSL2D18-150Y | 15.0±30% | 0.1V/100K | 0.220 | 0.35 | 0.80 |
| SSL2D18-220Y | 22.0±30% | 0.1V/100K | 0.320 | 0.30 | 0.68 |
| SSL2D18-330Y | 33.0±30% | 0.1V/100K | 0.460 | 0.24 | 0.56 |
| SSL2D18-470Y | 47.0±30% | 0.1V/100K | 0.660 | 0.20 | 0.48 |
| | | | | | |
| | | | | | |
| | | | | | |

5.Material List

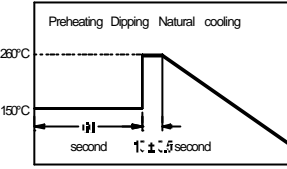
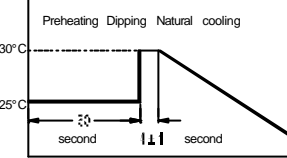


| NO | ITEM | MATERIA |
|----|------|------------------------|
| 1 | CORE | FERRITE CORE (DR TYPE) |
| 2 | CORE | FERRITE CORE (RI TYPE) |
| 3 | GLUE | G500 |
| 4 | WIRE | ENAMELLED COPPER WIRE |
| 5 | CLIP | SM212-032ET2N |

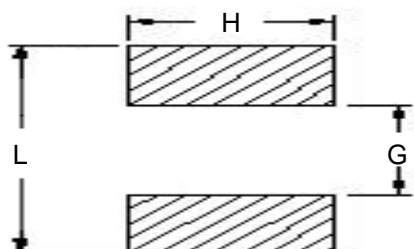
6. Schematic Diagram



7. Reliability and Test Condition

| Item | Performance | Test Condition | | | | | | | | | | | | | | | |
|----------------------------------|--|--|-------|----------------|-----------|---|--------|-------|---|------------|----|---|--------|-------|---|------------|----|
| Operating Temperature | -20~+105 | | | | | | | | | | | | | | | | |
| Storage temperature | -40~+85 | | | | | | | | | | | | | | | | |
| Rated Current | Base on temp. rise & L/LOA=25% typ. | | | | | | | | | | | | | | | | |
| Temperature Rise Test | 40 max. (t) | | | | | | | | | | | | | | | | |
| Solder heat Resistance | Appearance: No significant abnormality Inductance change: Within $\pm 20\%$. |  <p>Preheat:150 ,60sec. Solder : H63A Solder temperature:260 ±5 Flux: rosin Dip time:10 ±0.5sec.</p> | | | | | | | | | | | | | | | |
| Solderability | More than 90% of the terminal electrode should be covered with solder. |  <p>Preheat:125 ±5 ,60sec. Solder : H63A Solder temperature:230 ±5 Flux: rosin Dip time:4 ±1sec.</p> | | | | | | | | | | | | | | | |
| Thermal shock | Appearance: no damage. Inductance: within $\pm 20\%$ of initial value. | <table border="1" data-bbox="742 929 1045 1153"> <thead> <tr> <th>Phase</th> <th>Temperature()</th> <th>Time(min)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>-25 ±2</td> <td>30 ±3</td> </tr> <tr> <td>2</td> <td>Room Temp.</td> <td>15</td> </tr> <tr> <td>3</td> <td>+85 ±2</td> <td>30 ±3</td> </tr> <tr> <td>4</td> <td>Room Temp.</td> <td>15</td> </tr> </tbody> </table> <p>For SSL Condition for 1 cycle Step1:-25 ±2 30 ±3 min. Step2:Room temperature 15 min. Step3:+85 ±5 30 ±3 min. Step4: Room temperature 15 min. Number of cycles:50 Measured:50 times</p> | Phase | Temperature() | Time(min) | 1 | -25 ±2 | 30 ±3 | 2 | Room Temp. | 15 | 3 | +85 ±2 | 30 ±3 | 4 | Room Temp. | 15 |
| Phase | Temperature() | Time(min) | | | | | | | | | | | | | | | |
| 1 | -25 ±2 | 30 ±3 | | | | | | | | | | | | | | | |
| 2 | Room Temp. | 15 | | | | | | | | | | | | | | | |
| 3 | +85 ±2 | 30 ±3 | | | | | | | | | | | | | | | |
| 4 | Room Temp. | 15 | | | | | | | | | | | | | | | |
| Humidity Resistance Test | Appearance: no damage. Inductance: within $\pm 20\%$ of initial value. | Temperature:40 ±2 . Applied current:rated current. Duration:500 hrs. Humidity:90~95% | | | | | | | | | | | | | | | |
| High Temperature Resistance Test | Appearance: no damage. Inductance: within $\pm 20\%$ of initial value. | Temperature:85 ±2 . Applied current:rated current. Duration:500 hrs. | | | | | | | | | | | | | | | |

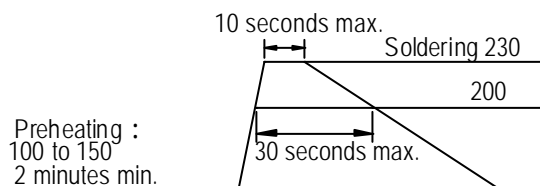
8. Recommended PC Board Pattern



| L | G | H |
|-----|-----|-----|
| 4.3 | 1.7 | 1.3 |

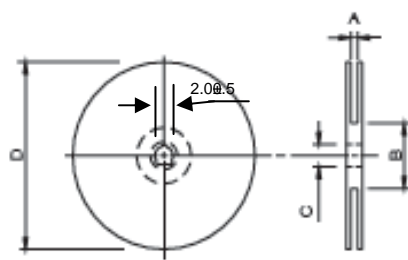
Units: mm

RECOMMENDED SOLDERING CONDITIONS REFLOW SOLDERINGS

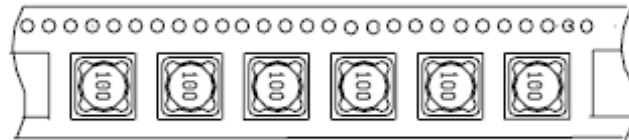
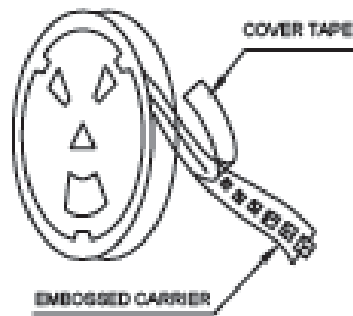


9. Packaging Information

9-1. Reel Dimension & Tape Dimension



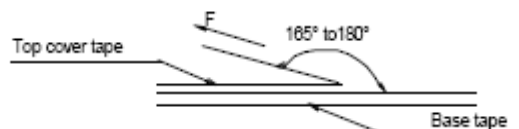
| Type | A(mm) | B(mm) | C(mm) | (mm) |
|-------|----------|-------|--------|------|
| 7x12m | 12.0±0.5 | 100±1 | 13±0.2 | 330 |



9-2. Packaging Quantity

| | |
|-------------|--------|
| SSL | 2D18 |
| Chip / Reel | 1000 |
| Carton | 8000 |
| Reel Style | 7"x12m |

9-3. Tearing Off Force



The force for tearing off cover tape is 15 to 60 grams in the arrow direction under the following conditions.

| Room Temp. (°C) | Room Humidity (%) | Room atm (hPa) | Tearing Speed mm/min |
|-----------------|-------------------|----------------|----------------------|
| 5~35 | 45~65 | 860~1060 | 300 |

Application Notice

• Storage Conditions

To maintain the solderability of terminal electrodes:

1. Temperature and humidity conditions: Less than 40°C and 70% RH.
2. Recommended products should be used within 6 months from the time of delivery.
3. The packaging material should be kept where no chlorine or sulfur exists in the air.

• Transportation

1. Products should be handled with care to avoid damage or contamination from perspiration and skin oils.
2. The use of tweezers or vacuum pick up is strongly recommended for individual components.
3. Bulk handling should ensure that abrasion and mechanical shock are minimized.