

SDDA Series

SMD Shielded Power Inductor

Size 1280

FEATURES

- Low loss realized with low DCR.
- High performance realized by metal dust core.

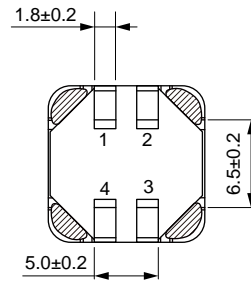
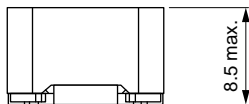
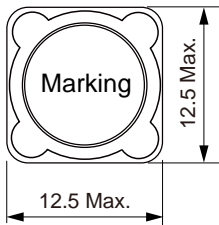
- 100% Lead(Pb)-Free and RoHS compliant.
-
-
-



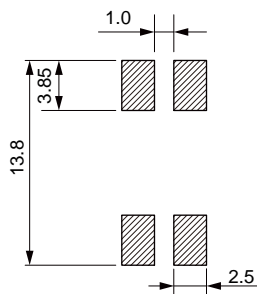
APPLICATION

-
- HVAC
-
- Audio subsystem
- Digital instrument cluster
-
- SEPIC circuit

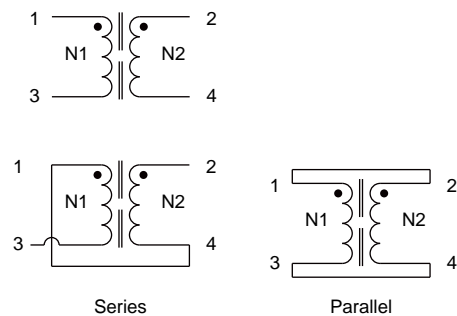
Dimensions: [mm]



Land Patterns: [mm]



Schematic:



Electrical Properties:

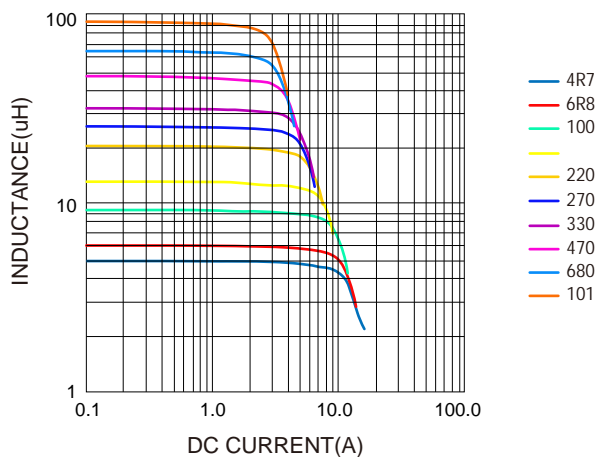
| Part No | Inductance @ 100KHz/0.1V | Tolerance | Temperature Rise Current Typ. | Current Typ. | Current Max. | DC Resistance Max. | Hi-POT |
|---------------|--------------------------|-----------|-------------------------------|--------------|--------------|--------------------|--------|
| SDDA1280-4R7M | 4.7 | ±20% | | 12.9 | 9.2 | | |
| SDDA1280-6R8M | 6.8 | ±20% | | 11.4 | 8.1 | 29 | |
| SDDA1280-100M | 10 | ±20% | 4.1 | 9.8 | 6.8 | 36 | |
| | | ±20% | 3.6 | 7.0 | | 40 | |
| SDDA1280-220M | 22 | ±20% | 3.0 | 6.7 | 4.7 | 72 | |
| SDDA1280-270M | 27 | ±20% | 2.7 | | 3.9 | 96 | |
| SDDA1280-330M | 33 | ±20% | | | 3.6 | | |
| SDDA1280-470M | 47 | ±20% | 2.2 | 4.3 | 3.1 | 132 | |
| SDDA1280-680M | 68 | ±20% | 1.8 | 3.6 | | 206 | |
| SDDA1280-101M | 100 | ±20% | | 3.0 | 2.1 | 280 | |

Saturation Current will cause L to drop approximately 30%

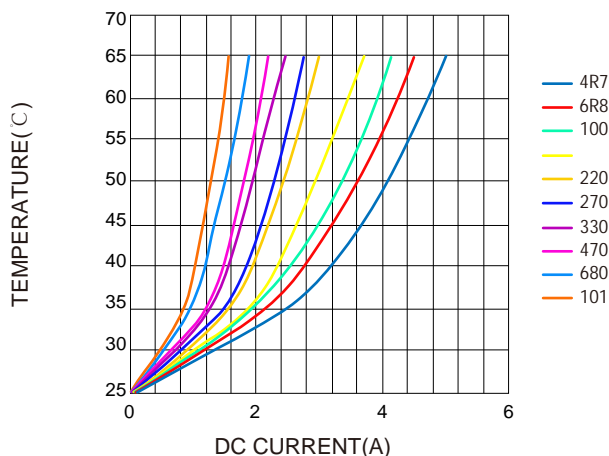
Temperature Rise Current: The actual value of DC current when the temperature rise is $\Delta T=40^{\circ}\text{C}$

Typical Electrical Characteristics:

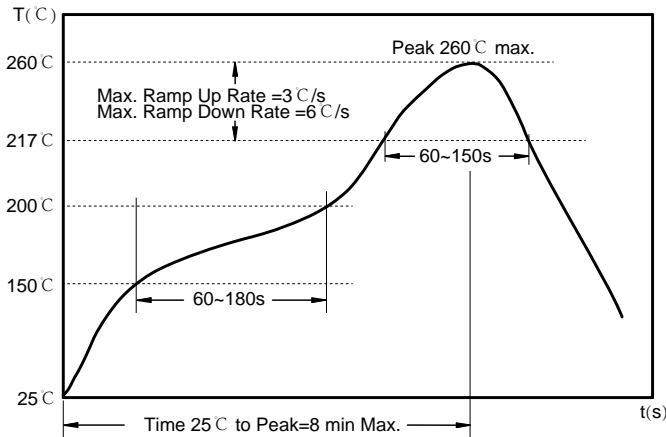
Inductance VS. DC Current Characteristics:



Temperature VS. DC Current Characteristics:



Soldering Reflow:



Preheat condition: 150 ~200°C / 60~180 sec.

Allowed time above 217°C : 60~150 sec.

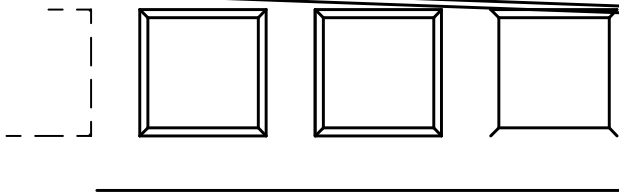
Max temperature: 260°C .

Max time at max temperature: 5 sec.

Allowed Reflow time: 3x max.

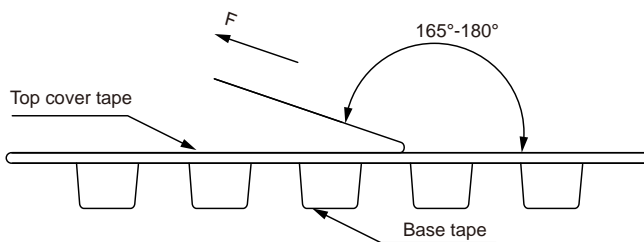
Packaging Information:

Tape Dimension :



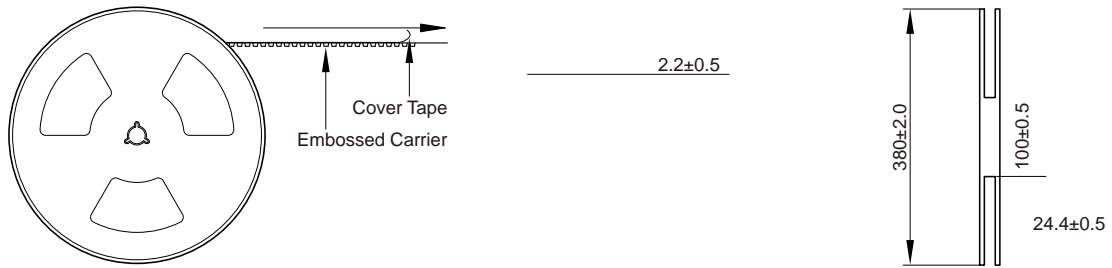
| Series | A0 (mm) | B0 (mm) | D (mm) | P0 (mm) | P1 (mm) | W (mm) | K0 (mm) | E (mm) | T (mm) |
|----------|----------|----------|---------|---------|----------|----------|---------|----------|-----------|
| SDDA1280 | 12.5±0.1 | 12.5±0.1 | 1.5±0.1 | 4.0±0.1 | 20.0±0.1 | 24.0±0.3 | 8.4±0.1 | 1.75±0.1 | 0.50±0.05 |

Peel force of top cover tape:



The peel force of top cover tape shall be between 0.1 to 1.3 N

Reel Dimension: [mm]



Packaging Quantity:

500 Pcs/Reel

2 Reel /Inner box(1000 Pcs)