

SDDA Series

SMD Shielded Power Inductor

Size 1280



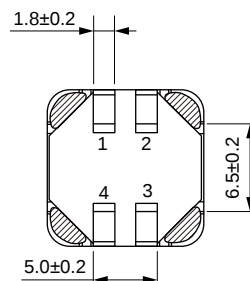
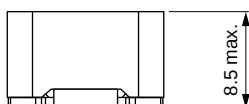
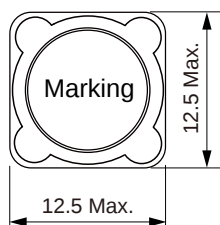
FEATURES

- Low loss realized with low DCR.
- High performance realized by metal dust core.
Ultra low buzz noise, due to composite construction.
- 100% Lead(Pb)-Free and RoHS compliant.
- AEC-Q200 qualified
- Operating temperature: -50 to +150 °C (including self-temperature rise)
- Quantity: 500PCS

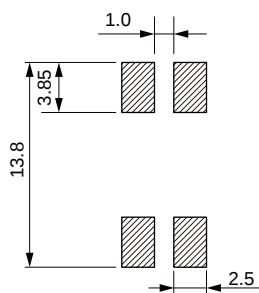
APPLICATION

- Headlamps, tail lamps and interior lighting
- HVAC
- Doors, window lift and seat control
- Audio subsystem
- Digital instrument cluster
- In-Vehicle Infotainment and navigation
- SEPIC circuit

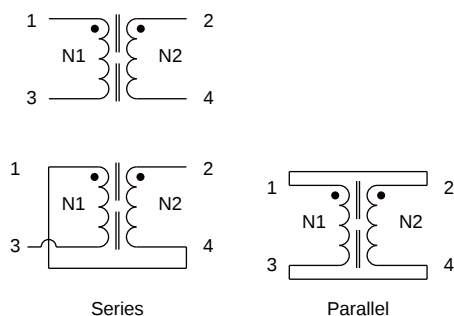
Dimensions: [mm]



Land Patterns: [mm]



Schematic:



Electrical Properties:

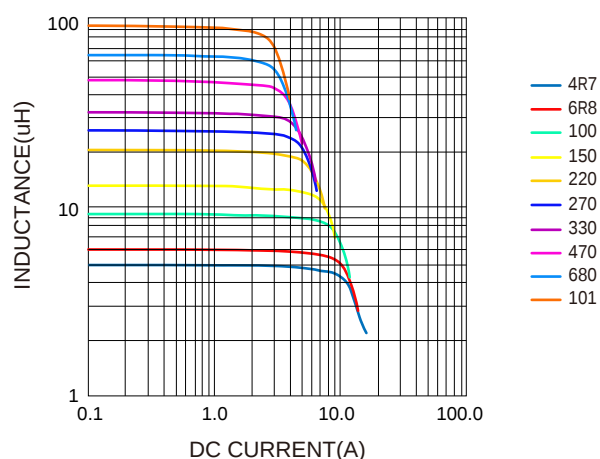
Part No	Inductance @ 100KHz/0.1V (μ H)	Tolerance	Temperature Rise Current Typ. (A)	Satura on Current Typ. (A)	Satura on Current Max. (A)	DC Resistance Max. (m Ω)	Hi-POT
SDDA1280-4R7M	4.7	$\pm 20\%$	5.0	12.9	9.2	25	DC 500V/1Sec
SDDA1280-6R8M	6.8	$\pm 20\%$	4.5	11.4	8.1	29	DC 500V/1Sec
SDDA1280-100M	10	$\pm 20\%$	4.1	9.8	6.8	36	DC 500V/1Sec
SDDA1280-150M	15	$\pm 20\%$	3.6	7.0	5.2	40	DC 500V/1Sec
SDDA1280-220M	22	$\pm 20\%$	3.0	6.7	4.7	72	DC 500V/1Sec
SDDA1280-270M	27	$\pm 20\%$	2.7	5.7	3.9	96	DC 500V/1Sec
SDDA1280-330M	33	$\pm 20\%$	2.5	5.2	3.6	105	DC 500V/1Sec
SDDA1280-470M	47	$\pm 20\%$	2.2	4.3	3.1	132	DC 500V/1Sec
SDDA1280-680M	68	$\pm 20\%$	1.8	3.6	2.5	206	DC 500V/1Sec
SDDA1280-101M	100	$\pm 20\%$	1.5	3.0	2.1	280	DC 500V/1Sec

Saturation Current will cause L to drop approximately 30%

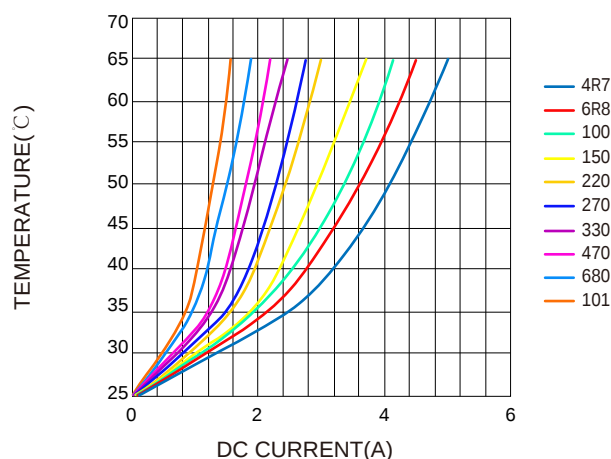
Temperature Rise Current: The actual value of DC current when the temperature rise is $\Delta T = 40^\circ\text{C}$

Typical Electrical Characteristics:

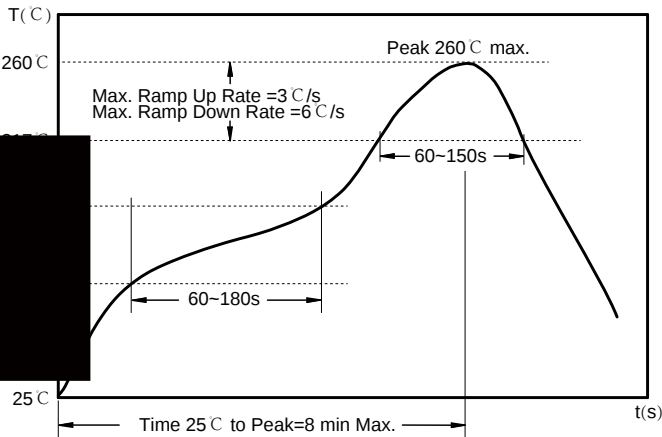
Inductance VS. DC Current Characteristics:



Temperature VS. DC Current Characteristics:



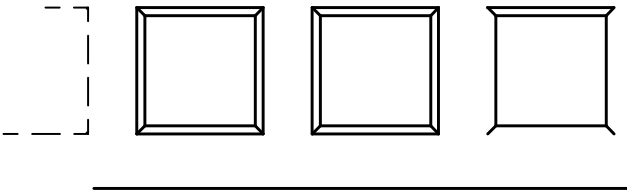
Soldering Reflow:



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.**B0**
 Allowed Reflow time: 3x max.

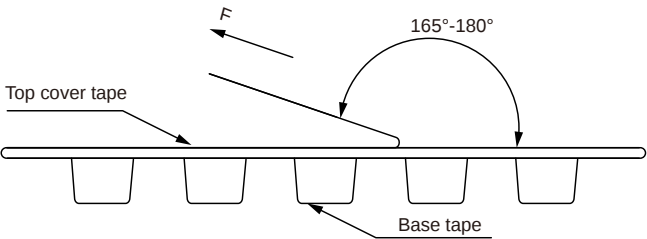
Packaging Information:

Tape Dimension :



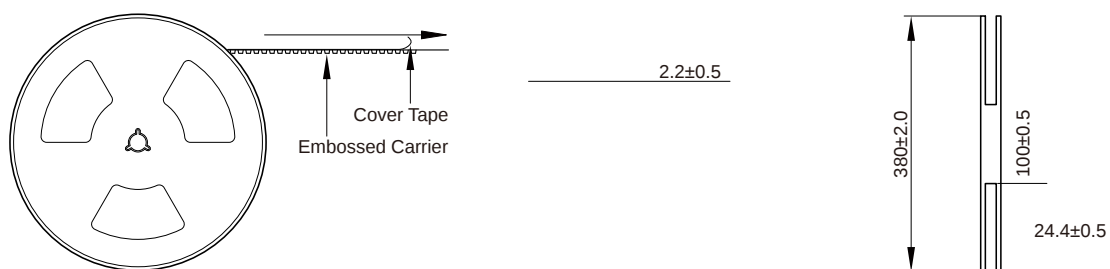
Series	A0 (mm)	B0 (mm)	D (mm)	P0 (mm)	P1 (mm)	W (mm)	K0 (mm)	E (mm)	T (mm)
SDDA1280	12.5±0.1	12.5±0.1	1.5±0.1	4.0±0.1	20.0±0.1	24.0±0.3	8.4±0.1	1.75±0.1	0.50±0.05

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)