







#### DISCRIPTION

#### **FEATURES**

Low resistance to keep power loss minimum.

#### **OPTIONS**

Tape & Reel is Standard Tolerance: M=20% is Standard, Tighter Tolerances Available

#### **APPLICATIONS**

Excellent for power line DC-DC conversion applications used in hard disk, notebook computers and other electronic equipment.

#### PHYSICAL CHARACTERISTICS

- Inductance is measured by LCR-meter 4284A/4286A (HP) or equivalent.
- DC Resistance is measured by HP4338B Milliohms Meter or equivalent.
- Rated current is measured by LCR-meter 3260B (WK) & DC Bias 3265B(WK).
- Maximum allowable DC current is that which causes a 25% inductance reduction from the initial value, or coil temperature to rise by 40°C, whichever is smaller.
   ( Reference ambient temperature 20°C )
- Operating temperature: -55°C ~ +125°C

#### **ELECTRICAL SPECIFICATIONS**

| Properties         | Test conditions |          | Value | Unit | Tol.       |
|--------------------|-----------------|----------|-------|------|------------|
| Inductance         |                 | L        | 180   | μH   | see Site 2 |
| Q factor           |                 | Q        |       |      | min.       |
| DC-resistance      |                 | DCR typ. |       | mΩ   | typ.       |
| DC-resistance      |                 | DCR max. | 1,45  | mΩ   | max.       |
| Self-Res. Freq.    |                 | SRF      |       | MHz  | min.       |
| Test-Freq.         |                 |          | 1     | KHz  |            |
| Rated Current      |                 | IDC      | 0,39  | Α    | max.       |
| Saturation Current |                 | Isat     |       | Α    | max.       |

1. This electronic component is meant to be used in general electronic equipment. Before the incorporation **SMT SHIELD** of this component into any equipment with higher and more reliable requirements such as aviation, **POWER INDUCTORS** aerospace, submarine, nuclear control, transportation, transportation signal, disaster prevention, medical, public information network, etc. or if there is a possibility of injuries or damages to the human body, Edcon -Components must be informed before the stage of design-in. Evaluation checks for safety have to be Part No.: S44003-181 performed on each electronic components used in electrical circuits that require high safety and reliability functions. Customer: DRW: Chang CHKD Young MATL: Chu Chi DATE 26.06.2009 APPD: **FINISH** Vienna 1 from 2 Pong Sheet



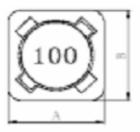




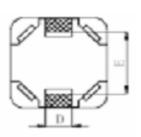


#### **TECHNICAL INFORMATIONS**

#### Dimensions (mm)







**A**  $7,3 \pm 0,3$  **B**  $7,3 \pm 0,3$ 

C 3,5 MaxD 1,8 ± 0,2

**E**  $5,0 \pm 0,2$ 

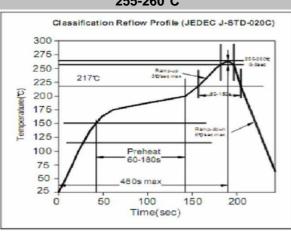
### Ordering Information

| Serie and Range |  |  |
|-----------------|--|--|
|                 |  |  |
| S44003-181      |  |  |

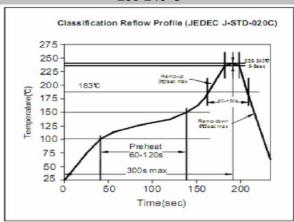
| Tolerance | ROHS | Packing |  |
|-----------|------|---------|--|
|           |      |         |  |
| М         | R    | TR      |  |

| <b>K</b> = 10% | R = ROHS     | <b>BU</b> = Bulk Ware |
|----------------|--------------|-----------------------|
| <b>M</b> = 20% | N = non ROHS | TR = Tape Reel        |

## Soldering Profile for Lead Free Soldering 255-260°C



### Soldering Profile for Lead Free Soldering 235-240°C



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# SMT SHIELD POWER INDUCTORS

Part No.: **\$44003-181** 

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