







#### DISCRIPTION

#### **FEATURES**

Low resistance to keep power loss minimum.

#### **OPTIONS**

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

#### **APPLICATIONS**

Excellent as DC-DC Converter used in notebooks computers, PDA and mobile handphones, Step-up or step-down converters, flash memory

#### PHYSICAL CHARACTERISTICS

- Inductance measured by LCR Meter HP 4284A
- DC Resistance measured by Milliohm meter HP4338B
- SRF measured by Network analyzer HP 4294/HP4291
- · SRF is for reference only
- △ Temperature = 40°C max at I rms
- △ L/L0A = 10% typical at I sat

#### **ELECTRICAL SPECIFICATIONS**

| Properties         | Test conditions |          | Value | Unit | Tol.       |
|--------------------|-----------------|----------|-------|------|------------|
| Inductance         |                 | L        | 18    | μH   | see Site 2 |
| Q factor           |                 | Q        |       |      | min.       |
| DC-resistance      |                 | DCR typ. |       | Ω    | typ.       |
| DC-resistance      |                 | DCR max. | 0,09  | Ω    | max.       |
| Self-Res. Freq.    |                 | SRF      | 19    | MHz  | min.       |
| Test-Freq.         |                 |          |       | KHz  |            |
| Rated Current      |                 | Irms     | 1,6   | Α    | max.       |
| Saturation Current |                 | Isat     | 1,8   | Α    | max.       |

This electronic component is meant to be used in general electronic equipment. Before the incorporation of this component into any equipment with higher and more reliable requirements such as aviation, 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 performed on each electronic components used in electrical circuits that require high safety and reliability functions.

# SMT SHIELD POWER INDUCTORS

Part No.: **\$45003-180** 

Customer:

 DRW:
 Chang
 CHKD
 Young
 MATL:
 Chu Chi
 DATE
 26.06.2009

 APPD:
 Pong
 FINISH
 Vienna
 Sheet
 1 from 2



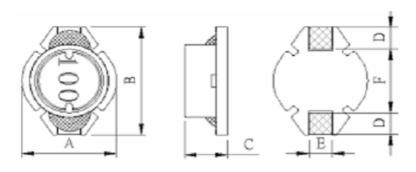






#### **TECHNICAL INFORMATIONS**

#### Dimensions (mm)



**A**  $10.0 \pm 0.2$  **C**  $5.0 \pm 0.3$  **E**  $2.2 \pm 0.2$  **B**  $12.7 \pm 0.2$  **D**  $2.4 \pm 0.2$  **F**  $7.6 \pm 0.3$ 

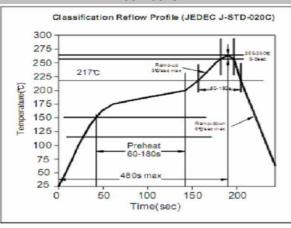
#### **Ordering Information**

| Serie and Range |  |
|-----------------|--|
|                 |  |
| S45003-180      |  |

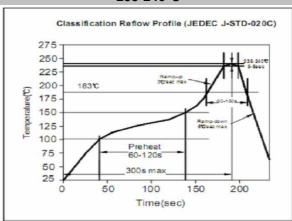
| Tolerance | ROHS           | Packing |  |
|-----------|----------------|---------|--|
|           |                | -       |  |
| M         | R              | TR      |  |
| ·         | ·              | ·       |  |
| 16 4007   | <b>D</b> 00110 |         |  |

| <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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