

## DISCRIPTION

### FEATURES

Magnetic Shielded surface mount inductor  
with high current rating.  
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 conversions  
used in hard disk, notebook computer 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
- All test data is referenced to 25°C ambient

## ELECTRICAL SPECIFICATIONS

| Properties         | Test conditions |                 | Value | Unit       | Tol.              |
|--------------------|-----------------|-----------------|-------|------------|-------------------|
| Inductance         |                 | <b>L</b>        | 680   | <b>µH</b>  | <b>see Site 2</b> |
| Q factor           |                 | <b>Q</b>        | ---   |            | <b>min.</b>       |
| DC-resistance      |                 | <b>DCR typ.</b> | ---   | <b>Ω</b>   | <b>typ.</b>       |
| DC-resistance      |                 | <b>DCR max.</b> | 4,63  | <b>Ω</b>   | <b>max.</b>       |
| Self-Res. Freq.    |                 | <b>SRF</b>      | ---   | <b>MHz</b> | <b>min.</b>       |
| Test-Freq.         |                 |                 | 1     | <b>KHz</b> |                   |
| Rated Current      |                 | <b>IDC</b>      | 0,22  | <b>A</b>   | <b>max.</b>       |
| Saturation Current |                 | <b>Isat</b>     | ---   | <b>A</b>   | <b>max.</b>       |

1. 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 SHIELDED POWER INDUCTOR

Part No.: **S47002-681**

Customer:

|       |       |      |       |        |         |       |            |
|-------|-------|------|-------|--------|---------|-------|------------|
| DRW:  | Chang | CHKD | Young | MATL:  | Chu Chi | DATE  | 29.06.2009 |
| APPD: | Pong  |      |       | FINISH | Vienna  | Sheet | 1 from 2   |



## TECHNICAL INFORMATIONS

### Dimensions ( mm )

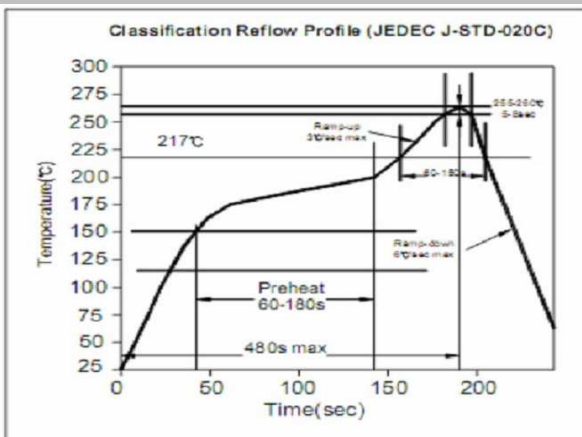


|          |           |          |           |          |           |
|----------|-----------|----------|-----------|----------|-----------|
| <b>A</b> | 7,3 ± 0,3 | <b>C</b> | 4,5 max   | <b>E</b> | 5,0 ± 0,2 |
| <b>B</b> | 7,3 ± 0,3 | <b>D</b> | 1,8 ± 0,2 |          |           |

### Ordering Information

|                        |                  |                     |                       |
|------------------------|------------------|---------------------|-----------------------|
| <b>Serie and Range</b> | <b>Tolerance</b> | <b>ROHS</b>         | <b>Packing</b>        |
| <b>S47002-681</b>      | <b>M</b>         | <b>R</b>            | <b>TR</b>             |
|                        | <b>K = 10%</b>   | <b>R = ROHS</b>     | <b>BU = Bulk Ware</b> |
|                        | <b>M = 20%</b>   | <b>N = non ROHS</b> | <b>TR = Tape Reel</b> |

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



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



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| APPD: | Pong  |      |       | FINISH | Vienna  | Sheet | 2 from 2   |