



## DISCRIPTION

### FEATURES

To be high saturation for surface mounting.  
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 conversion applications used in hard disk, notebook computers and other electronic equipment.

## PHYSICAL CHARACTERISTICS

- Inductance is measured by LCR-meter 4284A (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) at 1,0 KHz / 1,0V.
- Rated current : Value obtained when current flows and the temperature has risen to 30°C or when DC current flows and the initial value of inductance has fallen by 10%, whichever is smaller.
- 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>        | 390   | $\mu$ H  | see Site 2 |
| Q factor           |                 | <b>Q</b>        | ---   |          | min.       |
| DC-resistance      |                 | <b>DCR typ.</b> | ---   | $\Omega$ | typ.       |
| DC-resistance      |                 | <b>DCR max.</b> | 2,60  | $\Omega$ | max.       |
| Self-Res. Freq.    |                 | <b>SRF</b>      | ---   | MHz      | min.       |
| Test-Freq.         |                 |                 | 100   | KHz      |            |
| Rated Current      |                 | <b>IDC</b>      | 0,17  | A        | max.       |
| Saturation Current |                 | <b>Isat</b>     | ---   | A        | max.       |

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 POWER INDUCTOR

Part No.: **S49003-391**

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> | 6,00 ± 0,30 | <b>C</b> | 4,00 max | <b>E</b> | 2,00 ± 0,20 |
| <b>B</b> | 6,00 ± 0,30 | <b>D</b> | 4,00 typ |          |             |

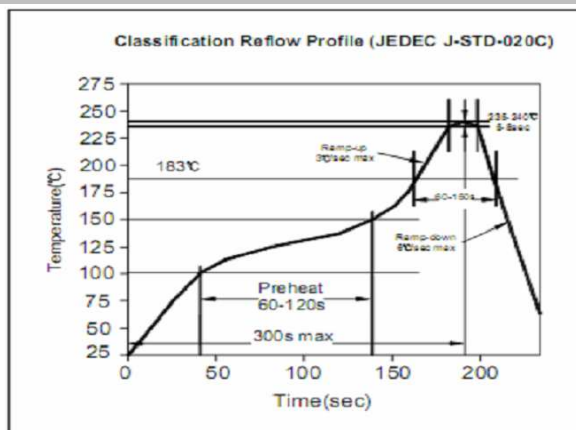
**Ordering Information**

| Serie and Range | Tolerance | ROHS         | Packing        |
|-----------------|-----------|--------------|----------------|
| S49003-391      | M         | R            | TR             |
|                 | K = 10%   | R = ROHS     | BU = Bulk Ware |
|                 | M = 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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