



## DISCRIPTION

### FEATURES

Magnetically Shielded Structure  
Low DC Resistance  
Excellent Mechanical Strength  
High Reliability and Excellent Solderability  
Low and square Profile  
High heat resistance

### OPTIONS

Tape & Reel is Standard ( Qty : 2500 pcs )  
Bulk Packing Available for smaller quantites  
Tolerance: J=5% ; K=10% is Standard,  
Tighter Tolerances Available

### APPLICATIONS

VCRs, Notebook, DC/DC Converters  
Video Digital Cameras  
Communication System  
Automotive System Power supplier  
LCD PDP Televisions  
Hard Disk Drives, Topset, XDSL  
Computer Peripheral Equipment

## PHYSICAL CHARACTERISTICS

- Inductor Testing : HP4284A ( Equivalent acceptable )  
DCR : QuadTech 1880 mΩ Q-HP4342A - SRF- HP4191A  
IDCMax current is decreased 10% against its initial value
- Operating temperature : -40°C ~ +105°C
- Storage temperature : -40°C ~ +105°C
- Solder methods : Vapor Phase, Infrared Reflow
- Resistance to soldering heat : 260°C for 10 seconds
- Solvent resistance : Conforms to MIL-STD-202E

## ELECTRICAL SPECIFICATIONS

| Properties         | Test conditions |          | Value | Unit | Tol.       |
|--------------------|-----------------|----------|-------|------|------------|
| Inductance         |                 | L        | 5,1   | μH   | see Site 2 |
| Q factor           |                 | Q        | ---   |      | min.       |
| DC-resistance      |                 | DCR typ. | ---   | Ω    | typ.       |
| DC-resistance      |                 | DCR max. | 0,130 | Ω    | max.       |
| Self-Res. Freq.    |                 | SRF      | ---   | KHz  | min.       |
| Test-Freq.         |                 |          | 100   | KHz  |            |
| Rated Current      |                 | IDC      | 1,00  | A    | max.       |
| Saturation Current |                 | I SAT    | ---   | 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.

### MAGNETIC SHIELDED SMT POWER INDUCTOR

Part No.: **S27002-5R1**

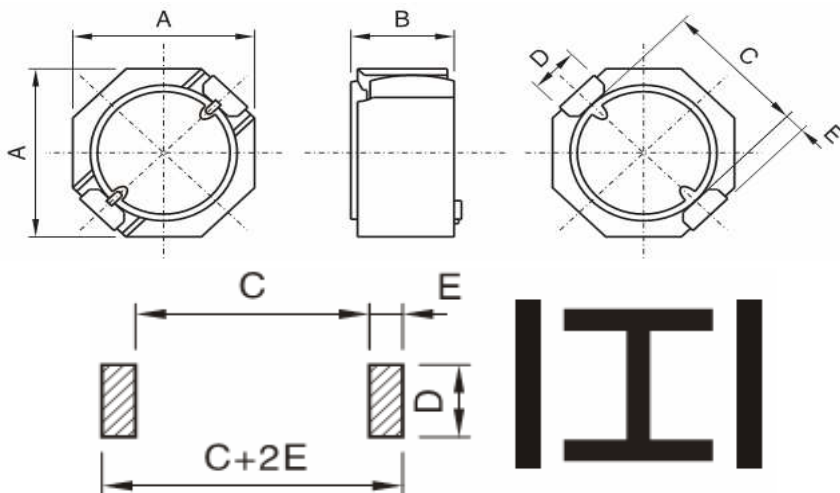
Customer:

|       |       |      |       |        |         |       |            |
|-------|-------|------|-------|--------|---------|-------|------------|
| DRW:  | Chang | CHKD | Young | MATL:  | Chu Chi | DATE  | 19.06.2009 |
| APPD: | Pong  |      |       | FINISH | Vienna  | Sheet | 1 from 2   |



## TECHNICAL INFORMATION

### Dimensions ( mm )



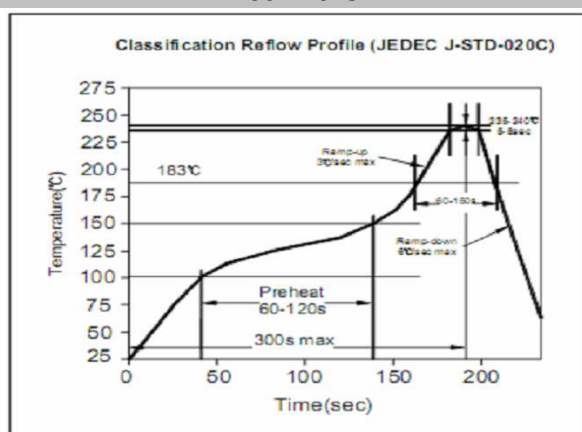
|             |           |
|-------------|-----------|
| <b>A</b>    | 5,2 max   |
| <b>B</b>    | 3,0 max   |
| <b>C</b>    | 4,2 ± 0,5 |
| <b>D</b>    | 1,4 ± 0,5 |
| <b>E</b>    | 0,6 ± 0,3 |
| <b>C+2E</b> | 5,4       |

### Ordering Information

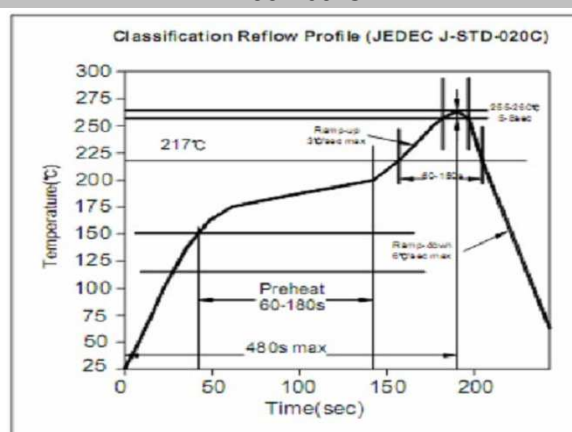
| Serie and Range   |
|-------------------|
| <b>S27002-5R1</b> |

| Tolerance      | ROHS                | Packing               |
|----------------|---------------------|-----------------------|
| <b>M</b>       | <b>R</b>            | <b>TR</b>             |
| <b>J = 5%</b>  | <b>R = ROHS</b>     | <b>BU = Bulk Ware</b> |
| <b>K = 10%</b> | <b>N = non ROHS</b> | <b>TR = Tape Reel</b> |
| <b>M = 20%</b> |                     |                       |
| <b>N = 30%</b> |                     |                       |

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



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



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