



## DISCRIPTION

### FEATURES

- Low profile very effective in space-conscious applications.
- Low resistance and high energy storage.
- Designed for smallest possible size, lowest cost and highest performance.
- High energy storage and very low resistance.
- Flat top for reliable surface mounting.
- Robust temperature deflection prevents damage during solder reflow.

### OPTIONS

- Tape & Reel is Standard
- Bulk Packing Available for smaller quantities
- Tolerance: M=20% is Standard

### APPLICATIONS

- DC-DC Converter
- Notebook
- PDA
- Mobile Hand-Phone
- Step-down Converters
- Flash Memory

## PHYSICAL CHARACTERISTICS

- Inductance tested at 100 kHz, 0,1 Vrms, 0 Adc at 4284A (HP) LCR meter or equivalent.
- Isat : DC current at which the inductance drops 10% (typ) from its value without current.
- Irms : Average current for 15°C temperature rise from 25°C ambient.
- Operating temperature range -40°C ~ +85°C.
- Electrical specifications at 25°C.

## ELECTRICAL SPECIFICATIONS

Properties	Test conditions		Value	Unit	Tol.
Inductance		<b>L</b>	220	$\mu$ H	see Site 2
Q factor		<b>Q</b>	---		min.
DC-resistance		<b>DCR typ.</b>	---	$\Omega$	typ.
DC-resistance		<b>DCR max.</b>	3,11	$\Omega$	max.
Self-Res. Freq.		<b>SRF</b>	5,5	Mhz	min.
Test-Freq.			---	Mhz	
Rated Current		<b>Irms</b>	200	mA	max.
Saturation Current		<b>Isat</b>	220	mA	typ.

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 Unshielded Power Inductor

Part No.: **S16003-221**

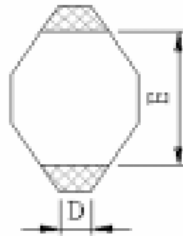
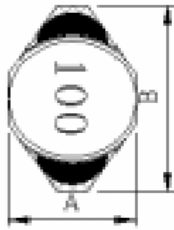
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**TECHNICAL INFORMATIONS**

**Dimensions ( mm )**



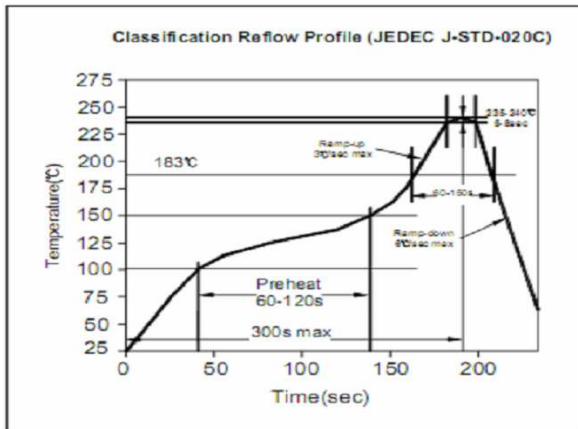
- A** 4,45 max
- B** 6,60 max
- C** 2,92 max
- D** 1,27 ± 0,15
- E** 4,32 ± 0,30

**Ordering Information**

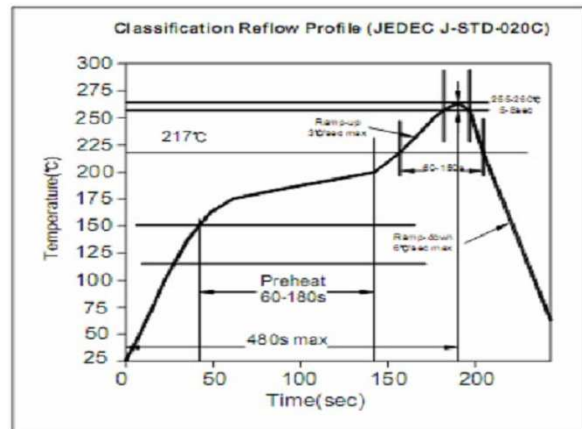
<b>Serie and Range</b>
<b>S16003-221</b>

<b>Tolerance</b>	<b>ROHS</b>	<b>Packing</b>
<b>M</b>	<b>R</b>	<b>TR</b>
<b>M = 20%</b>	<b>R = ROHS</b>	<b>BU = Bulk Ware</b>
	<b>N = non ROHS</b>	<b>TR = Tape Reel</b>

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



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



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