



## DISCRIPTION

### FEATURES

World's thinnest power inductor  
 - only 1 mm high  
 Low profile very effective in space-conscious applications.  
 Low resistance and high energy storage.  
 Ceramic cover provides the best possible surface for pick and place handling

### 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>	10	$\mu$ H	see Site 2
Q factor		<b>Q</b>	---		min.
DC-resistance		<b>DCR typ.</b>	---	$\Omega$	typ.
DC-resistance		<b>DCR max.</b>	0,24	$\Omega$	max.
Self-Res. Freq.		<b>SRF</b>	50	Mhz	min.
Test-Freq.			---	Mhz	
Rated Current		<b>Irms</b>	1500	mA	max.
Saturation Current		<b>Isat</b>	1000	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.: **S16002-100**

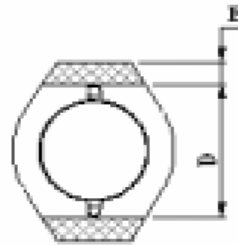
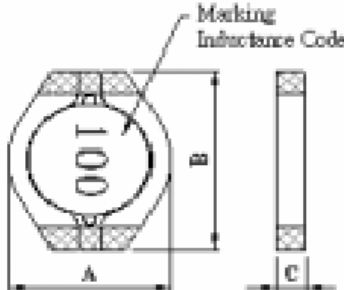
Customer:

DRW:	Chang	CHKD	Young	MATL:	Chu Chi	DATE	11.06.2009
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## TECHNICAL INFORMATION

### Dimensions ( mm )



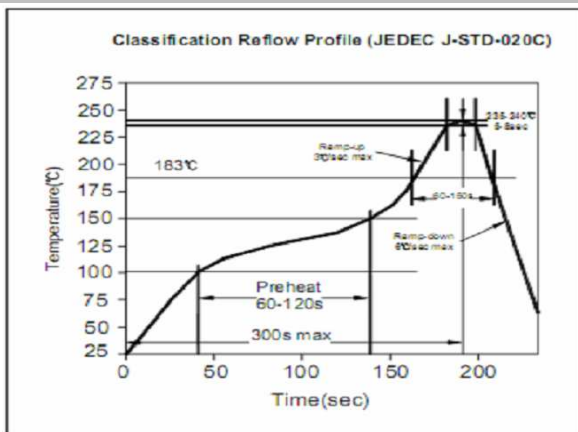
<b>A</b>	7,87 max
<b>B</b>	9,14 max
<b>C</b>	1,65 max
<b>D</b>	7,40 ± 0,15
<b>E</b>	0,87 ± 0,30

### Ordering Information

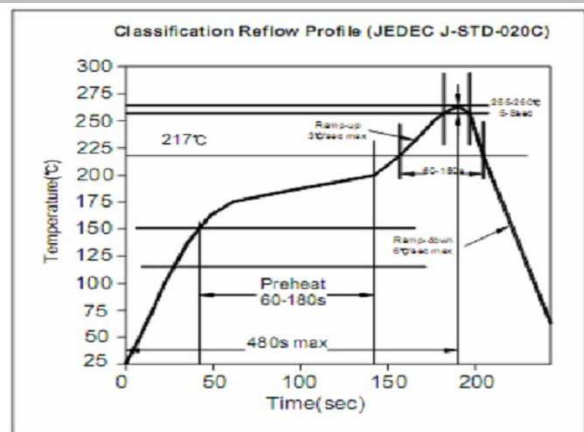
<b>Serie and Range</b>
<b>S16002-100</b>

<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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