



### Fuse Informations

<p>What are fuses?? They are protectors that prevent damage to electronic and electrical equipment. Fuses allow electric current to pass through them until the amount of current goes over the fuses rating. At the time, the fuse Blows and stop the flow of electric current. Fuses are rated in in amperes, the unit of measure for electric current.</p>	<p>( Overcurrent) A condition which exits on a electrical circuit when the normals current is exceeded. Overcurrents take on two separate characteristics - overloads and short circuits.</p>
<p>Fast-ACTING / SLOW BLOW. Fast Acting fuses react quickly to current overloads. Slow Blow fuses are less sensitive to start-up surge and protect against long-term overlaods</p>	<p>(Overload) Can be classified as an overcurrent which exceeds the normal full load current of a circuit. Also characteristics of this type of overcurrent is that it does not leave the normal current carrying path of the circuit. That is it flows from the source, through the conductors, through the load, back through the conductors, to the source again.</p>
<p>Fuse is a Saftey devices components. Always replace a blown fuse with the same type replace fast acting with fast acting, slow blow with slow blow. Slow Blow fuse are less sensitive to start-up the protection against long-term overloads.</p>	<p>(Voltage Rating) For general circuit protection, the voltage rating on the fuse should be equal to, or greater than the circuit voltage of the circuit in which the fuse is applied. Exceeding the voltage rating of a fuse impairs ist ability to clear an overload or short circuit safely. Fuse can be used at any voltage below the fuse voltage rating; a 250V fuse can be used in 125V circuits.</p>
<p>Thera are four basic types of fuse: Slow-Blow/ Time LAG - Dual Element slow blow fuses / Fast-acting / Very fast Acting fuses.</p>	<p>EDCON has carefull the right to change specifications on any and all items shown on the webside or any supplements without prior notice providing the performance or appearance will not change the function of the items.</p>
<p>A major type of slow blow fuse is the dual element fuse. This fuse consists of a short circuit strip and a soldered joint, spring connection. During overloads conditions, the soldered joints gets hot enough to melt and the spring shears the junction loose. Under short circuits conduitions the short circuit elements operstates to open the circuit. All dual-Elements fuses are considered to be slow blow, but not all slow blow fuses are dual elements.</p>	<p>EDCON has carefull prepared the webside specifications contained herein. These specifications are for reference only, any inaccuracies may be due to typographical errors or changes made after the publications on our webside.</p>
<p>Slow-blow fuses are ideal for circuits with a transient surge or power inrush. There circuits include: motors, transformers, incandescant lamps and capacitive loads. This inrush can be 20 times the normal current level. When using fast-acting, single elements type fuses, it is necessary to rate fuse at 150% to 300% of thre circuits full load curent. With this rating rule inrush may cause nuisance openings.</p>	<p>Cross Reference charts BUSSMANN / LITTLEFUSE / TELFUSE / BEL FUSE</p>
<p>Slow Blow fuses allow close rating of the fuse without nuisance opening. Typically rate the slow-blow fuses from 125% to 150° of the circuits full load process.</p>	<p>Testing standards and equipment utilized for UL, CSA, METI, and IEC ... etc. Approvals ( Specificy fuse type desired.</p>
<p>Fast-Acting fuses have no intentional built in slow-blow and are used in circuits without transient inrush Amp.</p>	<p>EDCON Components are guaranteed to be free form defects in material and workmanship for a reasonable period of time after delivery. Our öiability shall be limited to replacement to defective material only. Either seller or manufacturer shall be liable for any injury, loss or damage, direct or consequential, rising out of the use of or the inability to use the products for his intended use, user assumes all risk and liability whatsoever in connection therewith.</p>
<p>Very fast-acting fuses often have silver links. Because of the fuses current limiting ability, there fuses are frequently used to protect semiconductor circuits.</p>	
<p>The current carrying capacity of a fuse: The nominal value upon which all performance characteristics of a fuse are based.</p>	

<b>SMT CHIP FUSE SIZE 1812 QUICK ACTING</b>	
Part No.:	<b>R13001-1A50</b>
Customer:	

DRW:	Jason	CHKD	Jules	MATL:	Wu	DATE	06.08.2008
APPD:	Join			FINISH	Shieh	Sheet	1 from 3



**Features:**

R13001 is a small type of SMD fuse which has the same dimension as the 1812 type fuse. It can save valuable PCB boards. It also features top electrical speciality and high accurate current expression. This revolutionized SMD fuse is universal and doesn't have the drawbacks of ordinary SMD fuse which uses solder as its fuse element. Large tolerance of electric current and low interruption are its main characteristics. EDCON currently uses Cu-Ag alloy wire coating tin for the fuse and copper coating gold for the terminal both have the capacity to allow large surge current to pass through them.

**Technical Specifications**

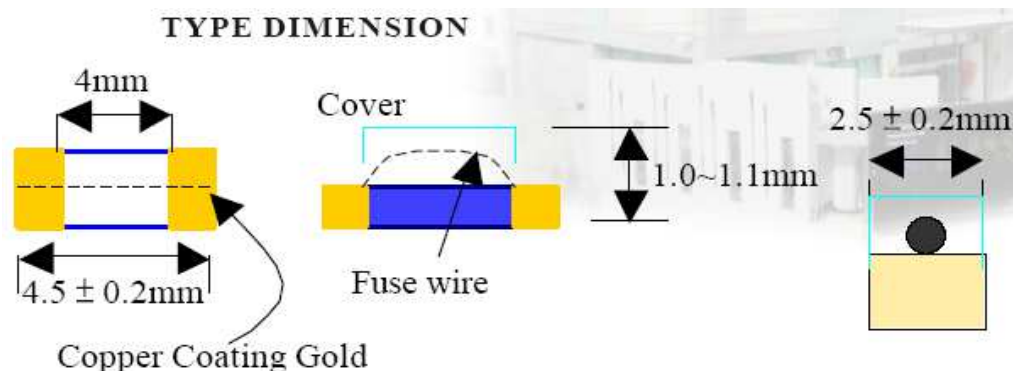
**Operating Temperature:** . -55°C to +125°C  
**Breaking Capacity:** 35A or 10In AT 125VAC/DC  
**Insulation Resistance:** (After Fuse Blow ) up to 5 M Ohm  
**Resistance to solder heat:** max. 260°C, 60sec.  
**Soldering parameters:** Wave Solder -260°C , 10sec max.  
 Reflow Solder -260°C, 30sec. Max.  
**Packing Specifications:** 8mm Tape and Reel per EIA-RS481: 5K/Reel

Rated Current	1,25 In	2 In	10 In	
	MIN	MAX	MIN	MAX
1500mA	1hr	120sec	1ms	10ms

Serie	Ampere Rating (In)	Voltage Rating (V)	Nominal Resistance Cold Ohms	Voltage Drop (mV) MAX.	Nominal Melting I <sup>2</sup> t A <sup>2</sup> sec Min.	Nominal Melting I <sup>2</sup> t A <sup>2</sup> sec Max.
R13001	1500mA	250V	0,056	70	2,25	0,225

**Mechanical Dimension**

**TYPE DIMENSION**



<b>SMT CHIP FUSE SIZE 1812 QUICK ACTING</b>	
Part No.:	<b>R13001-1A50</b>
Customer:	

DRW:	Jason	CHKD	Jules	MATL:	Wu	DATE	06.08.2008
APPD:	Join			FINISH	Shieh	Sheet	2 from 3

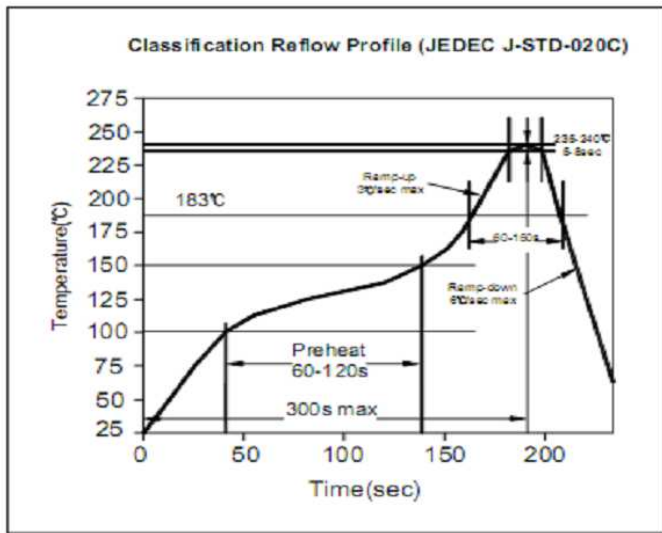
Copyright by EDCON-COMPONENTS H.Schmitt 20.6.2008



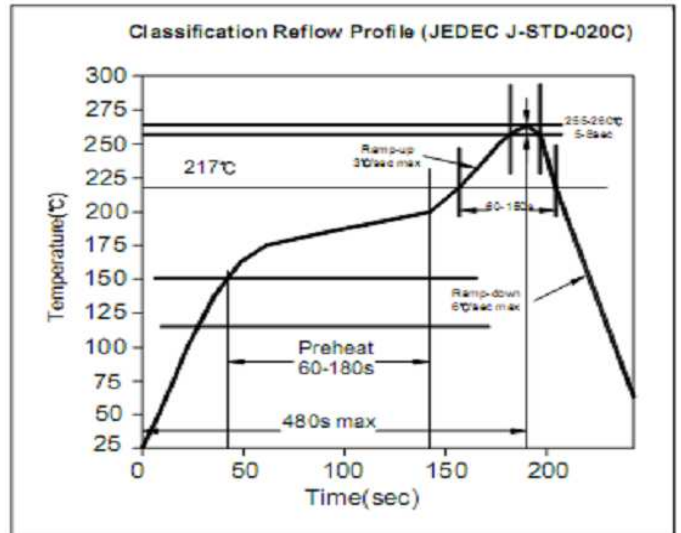
**Approvals**


		<b>PSE</b>					
<b>YES</b>							

**LEAD SOLDER CURVE**



**LEAD FREE SOLDER CURVE**



**Ordering Information**

Serie	Range	Function	ROHS	Packing		
<b>R13001</b>	<b>1A50</b>	<b>N</b>	<b>R</b>	<b>TR5</b>		

<b>1A50=</b> 1500mA	<b>N= NO</b> Function	<b>R= ROHS</b> Conform	<b>TR5=</b> Tape/Reel 5000PCS
<b>F1.5=</b> Marking Code on the item		<b>N= NON</b> ROHS	<b>BU1= Bulk-</b> Ware

<b>SMT CHIP FUSE SIZE 1812 QUICK ACTING</b>	
Part No.:	<b>R13001-1A50</b>
Customer:	

DRW:	Jason	CHKD	Jules	MATL:	Wu	DATE	06.08.2008
APPD:	Join			FINISH	Shieh	Sheet	3 from 3