







Fuse Informations

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.

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 overlands

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 sensitve to start-up the protection against long-term overloads.

Thera are four basic types of fuse: Slow-Blow/ Time LAG - Dual Element slow blow fuses / Fast-acting / Very fast Acting fuses.

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 opersates to open the circuit. All dual-Elements fuses are considered to be slow blow, but not all slow blow fuses are dual elements.

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 neccessary to rate fuse at 150% to 300% of thre circuits full load curent. With this rating rule inrush may cause nuisance openings.

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.

Fast-Acting fuses have no intentional built in slow-blow and are used in circuits without transient inrush Amp.

Very fast-acting fuses often have silver links. Because of the fuses current limiting ability, there fuses are frequently used to protect semiconductor circuits.

The current carrying capacity of a fuse: The nominal value upon which all performance characteristics of a fuse are based.

(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.

(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.

(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.

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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.

Cross Reference charts BUSSMANN / LITTLEFUSE / TELFUSE / BEL FUSE

Testing standards and equipment utilized for UL, CSA, METI, and IEC ... etc. Approvals (Specificy fuse type desired.

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.

IEC EUROPEAN Ceramic Body Fuses High Breaking Capacity Quick-Acting 5x20mm

Part No.: **R41005-12A5**

Customer:

DRW:	Jason	CHKD	Jules	MATL:	Wu	DATE	16.09.2009
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Resistance to Solder Heat:







Technical Specifications

Operating Temperature: . -55°C to +125°C

Shock: MIL-STD-202, Method 213, Test Condition 1

(Shaw toth)

Vibration: MIL-STD-202, Method 201,

(10-55Hz x 3 axis/no load

Salt Spray: MIL-STD-202, Method 101, Test Condition B

(48hrs)

Insulation Resistance: MIL-STD-202, Method 101, Test Condition A

(After Openeing) 10.000 Ohms minimum

MIL-STD-202, Method 210, Test Condition F

(10sec, at 260°C)

Thermal Shock: MIL-STD-202, Method 107, Test Condition B

 $(-65^{\circ}C \text{ to } +125^{\circ}C)$

Interrrupting Ratings: 35 amperes or 10 x rated current whichever

is greater at 250V AC/DC

Materials: Ceramic Body Body / Nickel Plated Brass Caps

Packaging: Bulk 100 / 1000PCS per Bag

Rated Current	1,5 ln	2,1 In	2,7	5 In	4	10 ln	
Rated Current	Min.	Max.	Min.	Max.	Min.	Max.	Max.
12,5A	60 Min.	30 Min.	10msec	2 sec	3ms	300ms	20ms

Serie	Ampere Rating (In)	Voltage Rating (V)	Nominal Resistance Cold Ohms	Voltage Drop (mV) MAX.	Nominal Melting I²t A² sec
R41005	12,5A	250V	0,0057	180	234

Mechanical Dimension



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Approvals

cac	(3)	(D)	DVE	FC	Œ	KEMA	<u>S</u>
YES	YES		YES				YES
(UL)	[V@I]	PSE	CCC				
YES		YES	YES				

Ordering Information

Serie	Range	ROHS	Packing			
		_		T	T	
R41005	12A5	R	BU101			

12A5= 12,5A	R= ROHS	BU101= Bulk-
12A3= 12,5A	Conform	Ware
	N= NON	100PCS
	ROHS	BU102 = Bulk
		Ware
		1000PCS

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