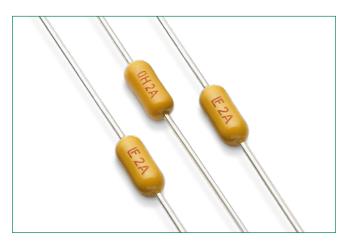
# PICO® II 521 Series

# AEC-Q200 Qualified > Very Fast-Acting Fuse





## **Description**

The 0521 PICO® II Very Fast-Acting Fuse Series is an AEC-Q200 Qualified fuse designed to meet an extensive array of performance characteristics in a space-saving sub-miniature package.

### **Features & Benefits**

- Very fast-acting
- Small size
- AEC-Q200 Qualified
- Applicable in wire harness application
- Halogen-free and RoHS-compliant
- Wide operating temperature range

### **Additional Information**







Resources

Accessories

Samples

### **Applications**

Secondary protection for space constrained applications:

Battery Management System protection

### **Electrical Characteristics**

% of Ampere Rating	Ampere Rating	Opening Time
100%	2A - 7A	4 Hours, Min.
200%	2A - 7A	1 Second, Max.

#### **Agency Approvals**

Agency	Agency File Number	Ampere Range	
c <b>'71</b> 0s	E10480	2A - 7A	

#### **Electrical Specifications**

Ampere Rating	Amp Code	Ordering Number	Max Voltage Rating	le Interrupting Rating	Nominal Cold Nominal Resistance Melting	Nominal Melting	Nominal Voltage Drop (V)	Agency Approvals		
(A)		(Std.)	(V)		(Ohms)	I <sup>2</sup> t (A <sup>2</sup> sec)		c <b>'RL</b> ° us		
2.00	002.	521002.	75		0.0473	0.405	0.141	X		
2.50	02.5	52102.5		75		0.036	0.70	0.132	X	
3.00	003.	521003.			75		0.0295	01.05	0.131	X
3.15	3.15	5213.15				300 A @	0.0275	1.26	0.129	X
3.50	03.5	52103.5				75 VDC	0.024	1.61	0.1205	X
4.00	004.	521004.					0.0204	2.02	0.114	X
5.00	005.	521005.					0.0158	03.61	0.11	X
7.00	007.	521007.					0.0109	9.23	0.102	X

#### Notes

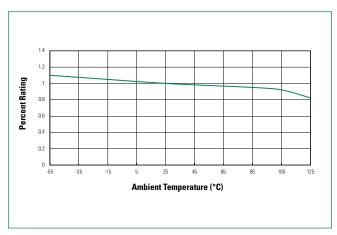
- 1. Cold resistance measured at less than 10% of rated current at 23° C.
- 2. I2tvalues measured at 8 ms opening time.



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#### **Temperature Re-rating Curve**



Note: Re-rating depicted in this curve is in addition to the standard derating of 25% for continuous operation.

#### **Soldering Perameters**

#### **Recommended Process Parameters:**

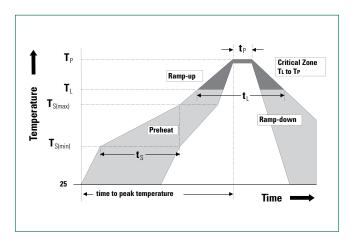
Wave Parameter	Lead-Free Recommendation
Preheat: (Depends on Flux Activation Temperature)	(Typical Industry Recommendation)
Temperature Minimum:	100° C
Temperature Maximum:	150° C
Preheat Time:	60-180 seconds
Solder Pot Temperature:	260° C Maximum
Solder Dwell Time:	2-5 seconds

### Recommended Hand Soldering Parameters:

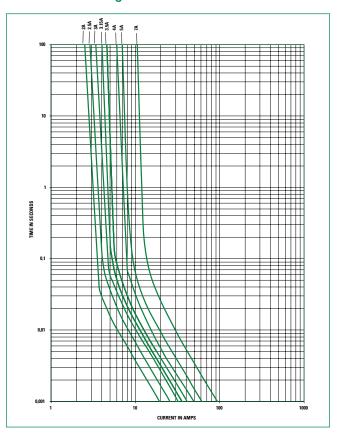
Solder Iron Temperature: 350° C +/- 5° C

Heating Time: 5 seconds max.

Note: These devices are not recommended for IR or Convection Reflow process



#### **Average Time Current Curves**





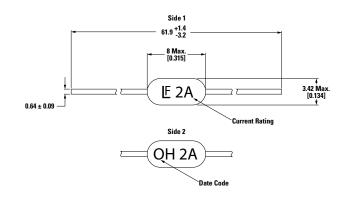
# PICO® II 521 Series

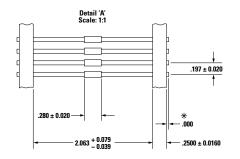
# AEC-Q200 Qualified > Very Fast-Acting Fuse

#### **Product Characteristics**

Materials	Body: Encapsulated, Epoxy-Coated Leads: Tin-Coated Copper
Product Marking	Body: Brand Logo, Current Rating, & Date Code
Lead Pull Force	MIL-STD-202, Method 211, Test Condition A (will withstand a 7 lbs. axial pull test)
Operating Temperature	-55° C to +125° C (Consider re-rating)
Resistance to Soldering Heat	Withstands 60 seconds above 200° C and up to 260° C, maximum
Vibration	MILSTD-202, Method 204, 10-2000-10 Hz vibration traversed in 20 minutes, with 5g peak, for 12 cycles in 3 planes
Thermal Shock	JESD22-A104, 15 min. at –55° C lowest temp and 15 min. at 125° C highest temp, 5 minutes maximum transition
Biased Humidity	MIL-STD-202, Method 103, Test Condition D
Flammability Rating	UL 94, V-0 epoxy coating
Electrical Characterization	Conducted at minimum, ambient and maximum temperatures

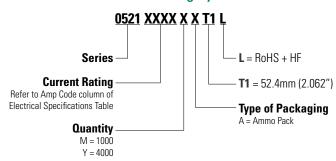
#### **Dimensions** mm (inches)





\* EIA Standard 296-E Allowed Maximum is .031, but Zero Lead Extension is preferred.

### **Part Numbering System**



### **Packaging**

Packaging Option	Packaging Specification	Quantity & Packaging Code
*T1: 52.4mm (2.062") Ammo-Pack	EIA 296-E	Please refer to available quantities above in "Part Numbering System"

The default lead length for both ammo pack and loose pack is T1.

**Notes**\* T1 dimension is defined as the length of the component between the two tapes. The full component length is 62.7 mm (2.468").

Disclaimer Notice - Information furnished is believed to be accurate and reliable. However, users should independently evaluate the suitability of and test each product selected for their own applications. Littelfuse products are not designed for, and may not be used in, all applications. Read complete Disclaimer Notice at https://www.littelfuse.com/legal/disclaimers/product-disclaimer.aspx.

