Fuse Datasheet

PICO[®] II 521 Series

Very Fast-Acting Fuse





Agency Approvals

Agency	Agency File Number	Ampere Range
c FL [®] us	E10480	2 A

Electrical Characteristics

Electrical Specifications

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

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

- Very fast-acting
- Small size
- AEC-Q200 qualified*
- Applicable in wire harness application

Benefits

- Small Size
- Meets Littelfuse's automotive qualifications*
- Halogen-free and **RoHS-compliant**
- Wide operating temperature range
- Wide range of temperature applications
- * Littelfuse internal AEC-0200 gualified

Applications

Secondary protection for space constrained applications:

Battery Management System protection

Agency Ampere Ordering Max Voltage **Nominal Cold** Nominal Nominal Approvals Interrupting Rating Amp Code Number Rating Resistance Melting Voltage Drop Rating (A) (Std.) (V) (Ohms) I²t (A² sec) (V) 300 A @ 002. 521002. 75 0.405 2.00 0.0473 0.141 Х 75 VDC

Notes

1. Cold resistance measured at less than 10% of rated current at 23° C.

2. I²tvalues measured at 8 ms opening time.

3. If you have special characteristic needs, please contact Littelfuse to discuss appllication specific options.

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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





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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	

Dimensions





* 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. Littlefuse 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.

