Fuse Datasheet

PICO[®] II 521 Series Very Fast-Acting AEC-Q200 Qualified Fuse





Additional Information



Electrical Characteristics

% of Ampere Rating	Ampere Rating	Opening Time
100%	2A - 7A	4 Hours, Min.
200%	2A - 7A	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 & Benefits

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

Applications

Secondary protection for space constrained applications:

Battery Management System protection

Agency Approvals

Agency	Agency File Number	Ampere Range	
c AL us	E10480	2A - 7A	

Electrical Specifications

Ampere Rating	Amp Code	Ordering Number	Max Voltage Rating	oltage Interrupting Resistance /) Rating (Ohms)	Nominal Cold Resistance	Nominal Melting I²t (A² sec)	Nominal Voltage Drop (V)	Agency Approvals		
(A)		(Std.)	(V) R		(Ohms)			c RU us		
2.00	002.	521002.	75		0.0473	0.405	0.141	Х		
2.50	02.5	52102.5		75		0.036	0.70	0.132	Х	
3.00	003.	521003.				0.0295	01.05	0.131	Х	
3.15	3.15	5213.15			75	300 A @	0.0275	1.26	0.129	Х
3.50	03.5	52103.5				75 VDC	0.024	1.61	0.1205	Х
4.00	004.	521004.					0.0204	2.02	0.114	Х
5.00	005.	521005.				0.0158	03.61	0.11	Х	
7.00	007.	521007.				0.0109	9.23	0.102	Х	

Notes

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

2. I²tvalues measured at 8 ms opening time.



Fuse Datasheet

PICO[®] II 521 Series Very Fast-Acting AEC-Q200 Qualified Fuse



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
$Preheat: \ (\text{Depends on Flux Activation Temperature})$	(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



Fuse Datasheet

PICO[®] II 521 Series Very Fast-Acting AEC-Q200 Qualified 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.spx.

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Fuses with Leads - Through Hole category:

Click to view products by Littelfuse manufacturer:

Other Similar products are found below :

89096-013 89096-015 203004 252001 252010 25202.5 252.062 263.500 265.750 272.005 274.250 252004 263.750 273.005 3701630000 LKB-3 0277007.V 0473004.MAT1L 0491002.MAT1 0697-4000-02 RST 2-BULK 0697-3150-02 RST 5-AMMO 047101.5MAT1L 89096-005 SR-5F-1-6A-BK 047301.5HAT1L 3721100041 SS-5H-1-25A-APH 0034.722 34.732 883120G FMS-R-E-800MA FXG-1A GFA-4 SS-5-2-5A-AP 047303.5YRT1L 047302.5YRT1L 0263004.HAT1L 026303.5HAT1L 0263.750HAT1L 0471002.MAT1L 0471005.MAT1L 0473001.HAT1L 0473002.HAT1L 0473003.MXL 0473.500HAT1L 0697-0100-01 0697-0315-01 0697A2000-01