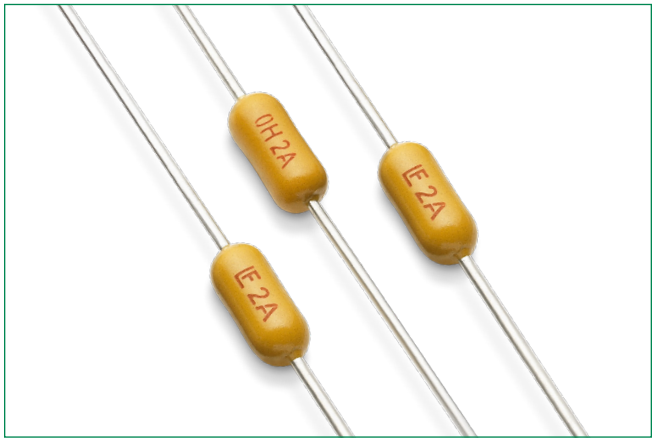
PICO® II 521 Series
Very Fast-Acting Fuse



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
- Small Size
- Meets Littelfuse's automotive qualifications*
- Wide range of temperature applications

* Largely based on Littelfuse internal AEC-Q200 test plan.

Agency Approvals

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

Electrical Characteristics

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

Applications

Secondary protection for space constrained applications:

- Battery Management System protection

Electrical Specifications

Ampere Rating (A)	Amp Code	Ordering Number (Std.)	Max Voltage Rating (V)	Interrupting Rating	Nominal Cold Resistance (Ohms)	Nominal Melting I^2t (A^2 sec)	Nominal Voltage Drop (V)	Agency Approvals c UL us
2.00	002.	521002.	75	300 A @ 75 VDC	0.0473	0.405	0.141	X
2.50	02.5	52102.5			0.036	0.70	0.132	X
3.00	003.	521003.			0.0295	01.05	0.131	X
3.15	3.15	5213.15			0.0275	1.26	0.129	X
3.50	03.5	52103.5			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. I^2t values 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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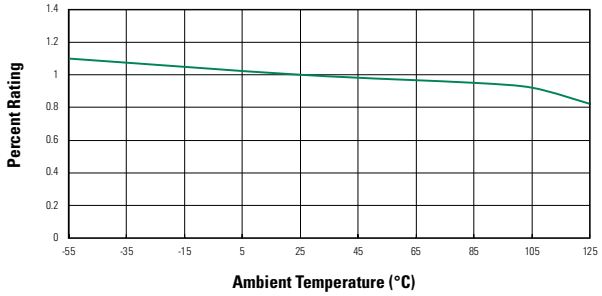
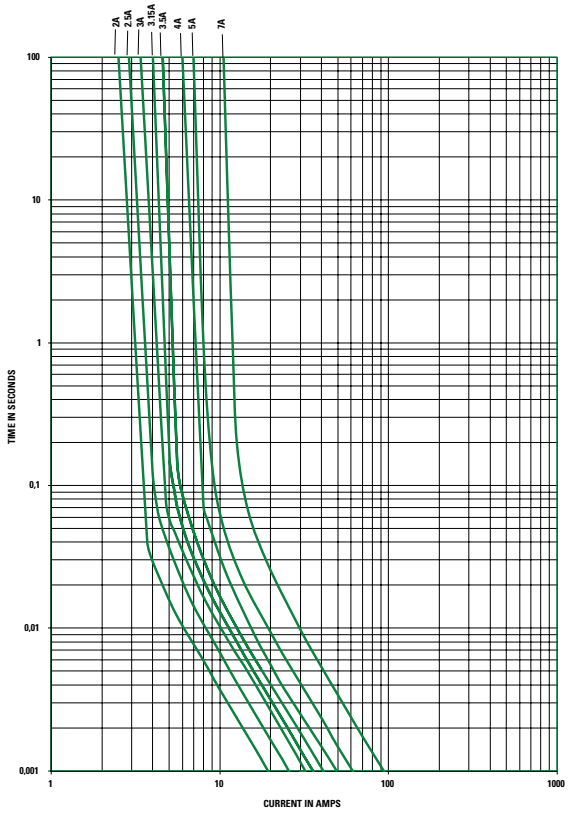
Temperature Re-rating Curve



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

Average Time Current Curves

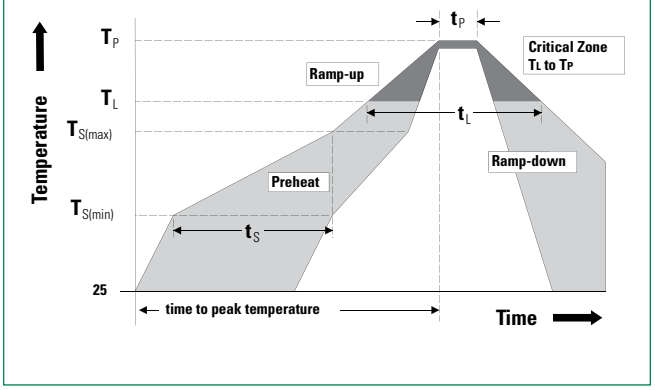


Soldering Perameters

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



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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	MIL-STD-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

Part Numbering System

0521 XXXX X X T1 L

Series

Current Rating
Refer to Amp Code column of Electrical Specifications Table

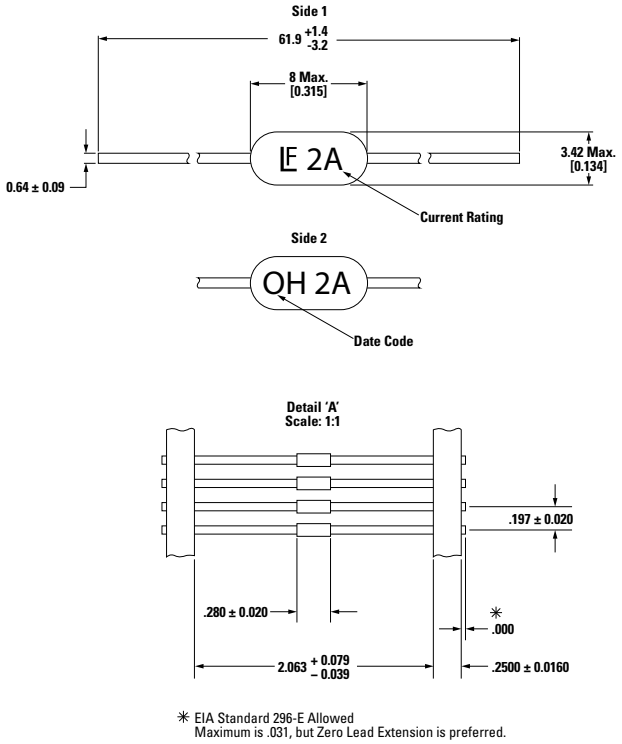
Quantity
M = 1000
Y = 4000

Type of Packaging
A = Ammo Pack

T1 = 52.4mm (2.062")

L = RoHS + HF

Dimensions



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

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").

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