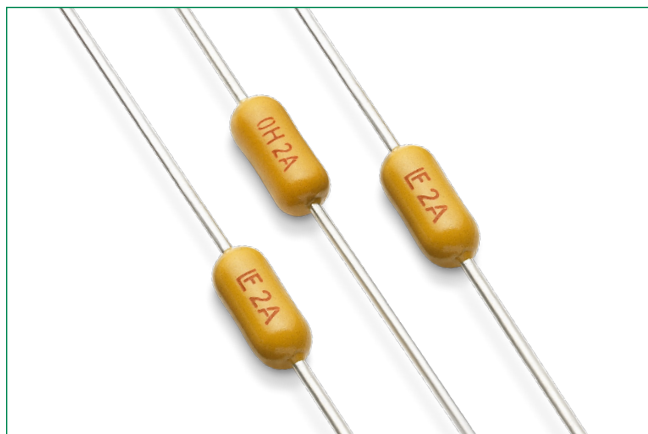


PICO® II 521 Series

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 UL US	E10480	2A - 7A

Electrical Specifications

Ampere Rating (A)	Amp Code	Ordering Number (Std.)	Max Voltage Rating (V)	Interrupting Rating	Nominal Cold Resistance (Ohms)	Nominal Melting I ² t (A ² sec)	Nominal Voltage Drop (V)	Agency Approvals
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

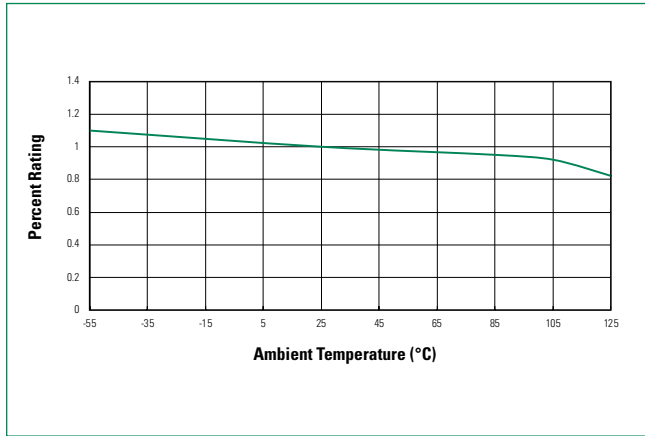
Notes

1. Cold resistance measured at less than 10% of rated current at 23° C.
2. I²t values 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 Parameters

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

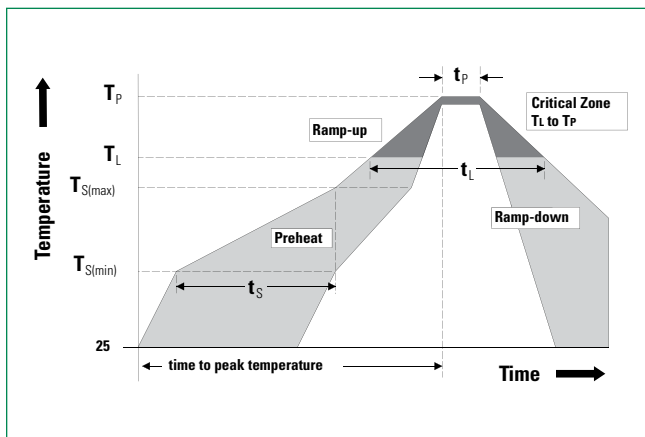
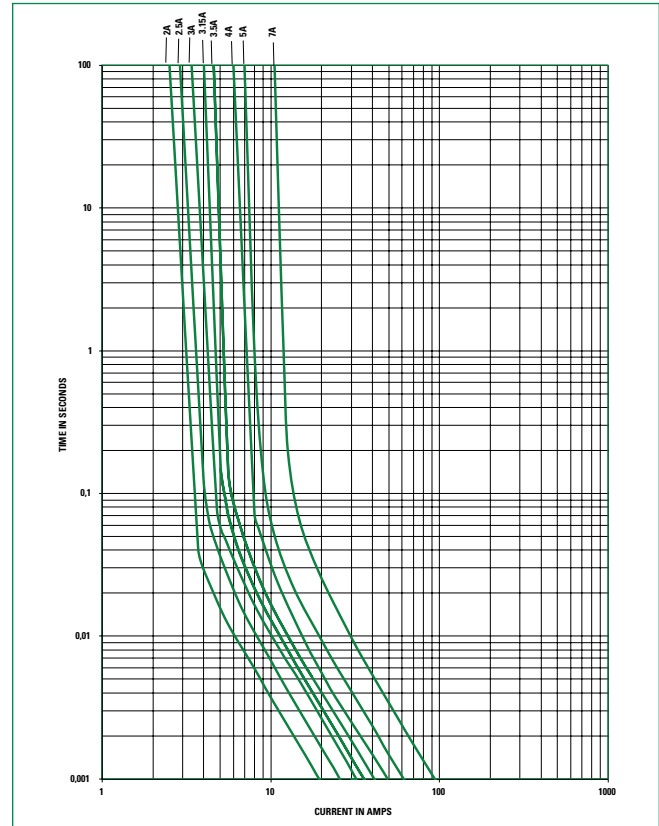
Recommended Hand Soldering Parameters:

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



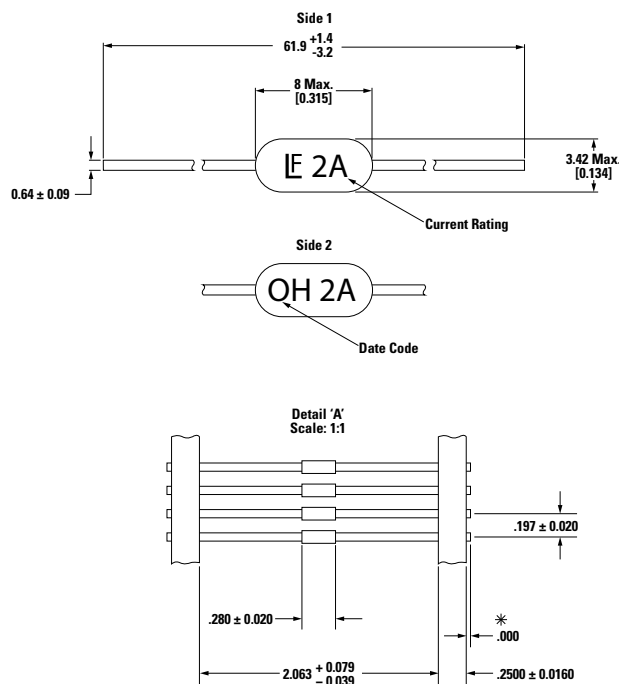
PICO® II 521 Series

AEC-Q200 Qualified > Very Fast-Acting Fuse

Product Characteristics

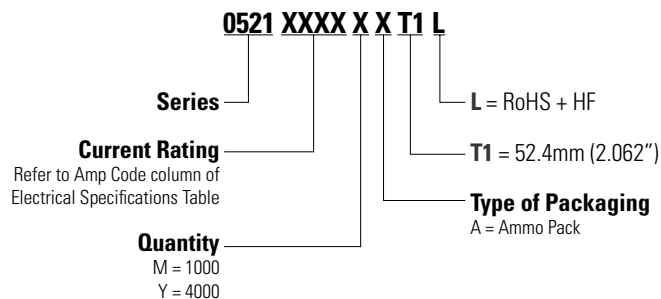
Materials	Body: Encapsulated, Epoxy-Coated Leads: Tin-Coated Copper
Product Marking	Body: Brand Logo, Current Rating, & Date Code
Lead Pull Force	MIL-STD-202, Method 211, Test Condition A (will withstand a 7 lbs. axial pull test)
Operating Temperature	-55° C to +125° C (Consider re-rating)
Resistance to Soldering Heat	Withstands 60 seconds above 200° C and up to 260° C, maximum
Vibration	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
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").

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