



UAI 1206

Non-aging

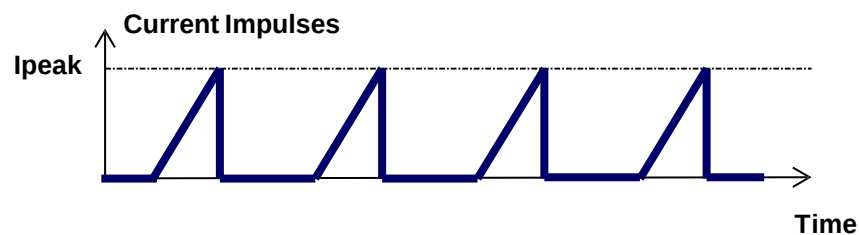
Great for potting

Qualified for automotive

The non-aging fuse for automotive applications

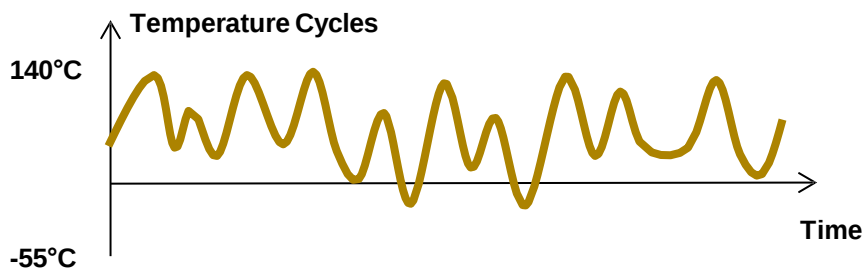
Problem: aging due to current and temperature impulses

Harsh mechanical and electronic **environments** cause a regular fuse to lose its properties over time. There are two causes that lead to fuse aging:



Current Impulses:

Regular fuses do remember the impulses it receives over time. The voltage drop increases and the fuse changes its properties.



Temperature Cycles:

Different materials have a different coefficient of expansion. Frequent and high temperature changes lead to mechanical stress inside a fuse



UAI 1206 – The non-aging fuse



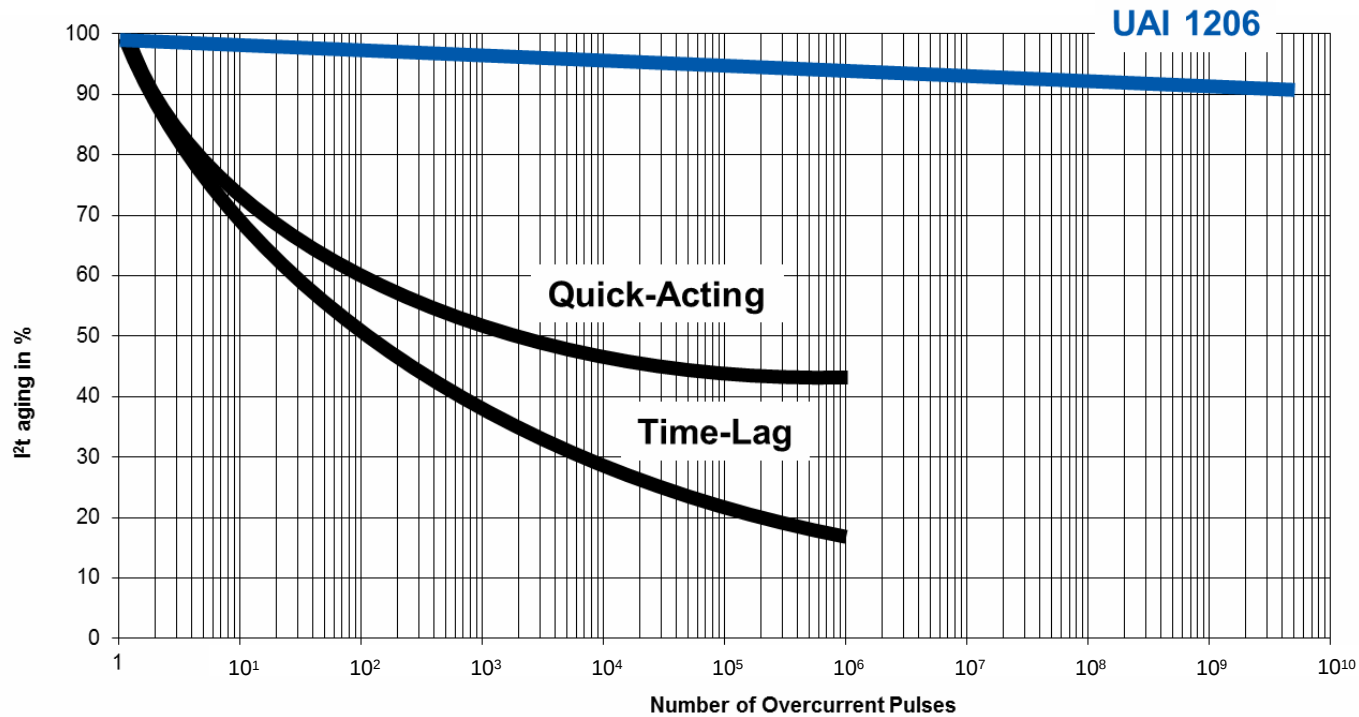
In order to address the aging issue, SCHURTER has done extensive research and development and has come up with great new technology which we call:

TRACE IN AIR

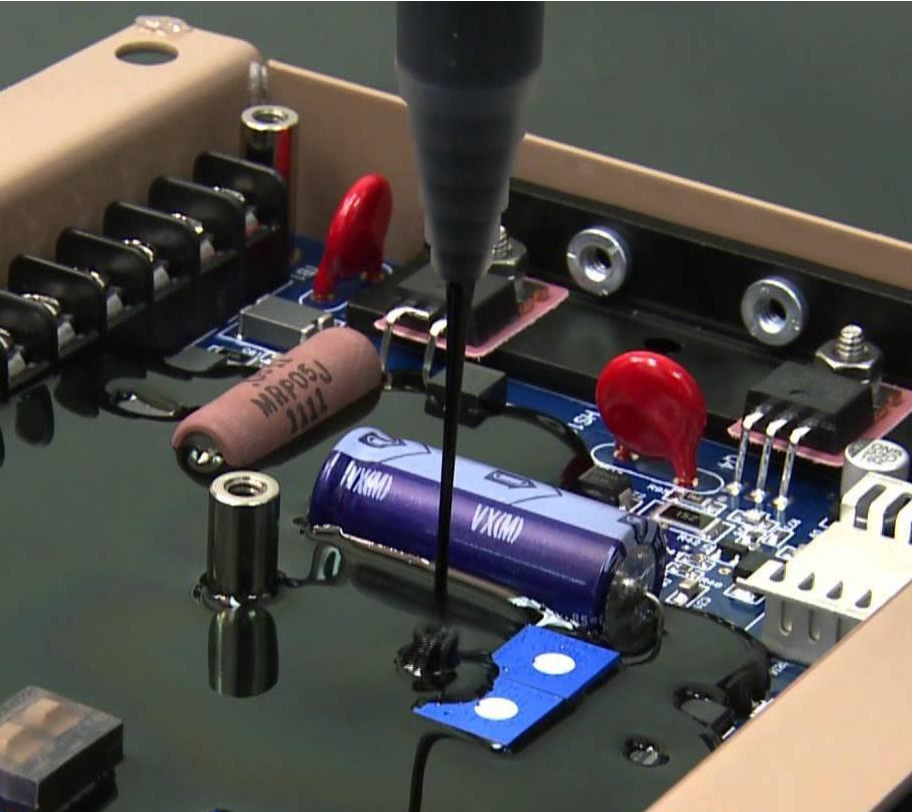
With this technology we have solved:

- > Current pulses below I^2t do not change the properties of the fuse -> **no aging**
- > Temperature cycles are absorbed without generating mechanical stress -> **no aging**

Aging compared to standard fuses



More than 5 billion overcurrent pulses without significant aging of the fuse I^2t value.



UAI 1206 – Fully Automotive

- > Not only is SCHURTER an IATF Certified company, the UAI 1206 was tested extensively to successfully pass all **AEC- Q200** requirements.

AEC Q200

- > Due to the harsh environment, Automotive PCBs are normally potted in order to increase safety. The UAI 1206 itself is perfectly sealed and therefore ready for potting.

Competitor comparison on AEC-Q200

The UAI 1206 is unlike its competitors; it is not based on a ceramic body design, rather a flexible fiberglass reinforced epoxy. This is a huge benefit for Mechanical Shock and Board Flex tests:

Mechanical Shock

(MIL-STD- 202G, Method 213)

Test condition	Peak value (g's)	Normal duration (D) (ms)	Waveform	Velocity change (V _i) ft/sec
A	50	11	Half-sine	11.3
B	75	6	Half-sine	9.2
C	100	6	Half-sine	12.3
D	500	1	Half-sine <u>1/ 2/ 3/</u>	10.2
E	1,000	0.5	Half-sine <u>1/ 2/ 3/</u>	10.2
F	1,500	0.5	Half-sine <u>1/ 2/ 3/</u>	15.4
G	50	11	Sawtooth <u>2/</u>	8.8
H	75	6	Sawtooth <u>2/</u>	7.2
I	100	6	Sawtooth <u>2/</u>	9.7
J	30	11	Half-sine	6.8
K	30	11	Sawtooth	5.3

~~AEC-Q200~~

AEC-Q200

Competitor comparison on AEC-Q200

	SCHURTER	Littelfuse	Bussmann	Belfuse	AEM
Model	UAI 1206	440A	CC12H	C1T	QF1206F
Mechanical Shock	Condition F	Condition C	Condition C	n/a	n/a

Mechanical Shock

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SCHURTER's UAI 1206 is the **only** fuse which fullfills AEC-Q200 entirely!

UAI 1206 – Applications

Fulfilling the AEC-Q200 Standard, the UAI is most suited for use in harsh environments such as those found in automotive vehicles. Ignition Coils, in particular, receive a huge number of current impulses during their lifetime. So the non-aging UAI 1206 is most suited for this application.

- Ignition Coils
- DC-DC Converters
- Power Supplies
- Examples of applications in harsh environments where current impulses and temperature cycles appear frequently...

UAI 1206 – Further Support

Additional Information:

- > [UAI 1206 Data Sheet](#)
- > See consolidated offering of fuses:
[Product overview fuses](#)
- > [Automotive Landing page](#)
- > Click on [Partner Services](#) to download:
 - > Latest press releases
 - > Training presentations
 - > Price list
- > Samples are distributed to subsidiaries

Technical Assistance:

- > Automotive customers usually need large quantities and generally require assistance with integration into a custom PCB. Please **involve our engineering** in the early stages of a bigger project!
- > For general product questions, contact your Inside Sales Representative
- > For technical assistance or specific design configurations, contact:

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