



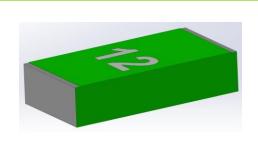
"Not Your Ordinary Fuse"

Thermal Sensitive Fuse USN 1206



USN 1206 - Technical Data









- Combines a Standard fuse characteristic with additional ambient temperature sensitivity
- > Ensure the complete time-current curve from 0 A to BC
- > USN shows a specified blowing behavior at a
 - defined **overcurrent** &
 - defined **temperature** &
 - defined **pre-arcing time**







→ Customer Specific Solution on Request ←

Standard Technical Data for instance for USN 1206 12A

> Rated Current: 12 A

> Rated Voltage: 32 VDC

> Breaking Capacity: 80 A @ 32 VDC / 170 A @ 16VDC

> Temperature Range: -40 °C to 90 °C

> Dimensions: SMD 1206

> Solderability: Reflow

Standards:

AEC-Q200

Approvals:

UL on Request

USN 1206 - Technical Data



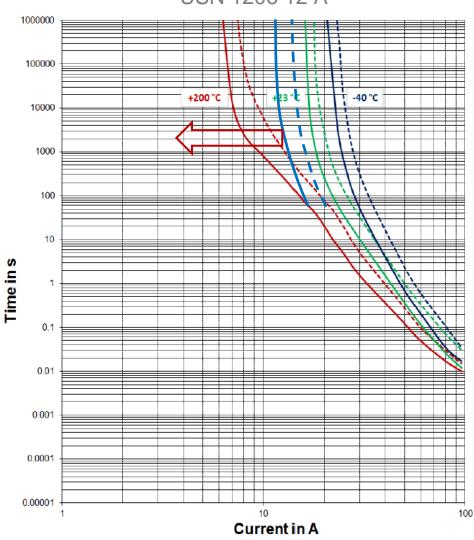
- Compliance Standards:
 - > AEC-Q200 for customized USN 1206 12 A
 - > Standards on Request (UL,IEC,MIL)
- > Approvals:
 - > On Request
- > Special customized technical data:
 - > Pre-arcing Time / defined **Current** / defined **Temperature** Characteristics
- Solderability and Resistance to Soldering Heat:
 - > 245 °C / 3 sec acc. to IEC 60068-2-58 Test Td
 - > 260 +0/-5°C / 30 sec acc. to IPC/JEDEC J-STD-020D, Level 1
- > Various MIL-STD-202 Methods for:
 - > Moisture Resistance Test, Terminal Strength, Vibration and Resistance to Solvents

USN 1206 - Time - Current - Curve



Time-Current-Curve





- A time-current-curve for a standard fuse would follow the blue lines even if the temperature is high
- > The time-current-curve for USN is shifting to the left while ambient temperature increases according the red arrow

USN 1206 - Market Position



Strategic Positioning

- > Extension of SCHURTER range and market advancement of SMD fuses.
- > New technology (patent pending)
- > Customized Solutions for big business

Price Position

> A bit higher then the Standard Chip Fuses

Applications

- > Every application where Chip Fuses are in use and ambient temperature is critical
- In markets as Industry, Automation, Consumers and Automotive

Competitors

> None

USP

- > Combines a Standard Fuse characteristic with an additional ambient temperature sensitivity
- > Ensures the complete time-current curve from 0 A to BC
- > Ceramic glase fiber inforced material
- > AEC Q200 on request
- > Other standards on request (UL,IEC,MIL)
- > Excellent Inrush current withstand capability
- > Impermeable to potting compound used to achieve hermetic seal for intrinsically safe applications according to ATEX and IECEx requirements
- > Compatible with reflow and wave soldering processes
- > Operating temperature range: -55°C to + 90°C
- > Halogen free, RoHS compliant and 100% lead free

USN 1206 - Applications



12V 4S 60A LiFePO4 Battery BMS





Battery

Control Unit

Motor



USN 1206 - Additional Information Page



Additional Information

- > <u>Data Sheet USN 1206 12 A</u>
- > Website enables quick access to sales and marketing materials
- > Click on <u>Partner Services</u> to download:
 - > Latest press releases
 - > Training presentations
 - > Price list (USN 1206 120 A)
 - > Product photos
- Samples only customized samples available (USN 1206 12 A)

Technical Assistance

For general product questions, please contact your Inside Sales Representative