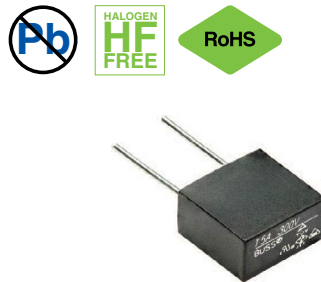


SS-5F

250 V Fast-acting subminiature fuse



Product description

- Fast-acting subminiature fuse
- Designed to UL 248-14
- Plastic cap and base, flammability UL 94V0
- 8.7 mm x 4.5 mm through hole package in a 8.05 mm height
- Protects against harmful overcurrents in primary and secondary applications
- Small radial-leaded design utilizes less board space
- Halogen free, lead free and RoHS compliant.

Applications

Primary and secondary circuit protection:

- Power supplies
- Notebooks and laptops
- Appliances and white goods
- Lighting ballasts
- Power adapters
- Set top boxes
- LED/LCD televisions and displays
- Air conditioners
- Battery chargers

Agency information

- cULus: Recognition file number E19180, Guide JDYX/JDYX7
- PSE: JET 1641-31007-1001, JET 1641- 31007-1002

Ordering

- Use ordering number (see page 4 for details)

Packaging suffixes

- -BK (200 parts in polybag, Lead L= 4.3 ±0.3 mm)
- -BK2 (200 parts in polybag, Lead L= 21 ±3.0 mm)
- -AP (1000 parts Ammo pack, Pitch =12.7 mm)

Electrical characteristics

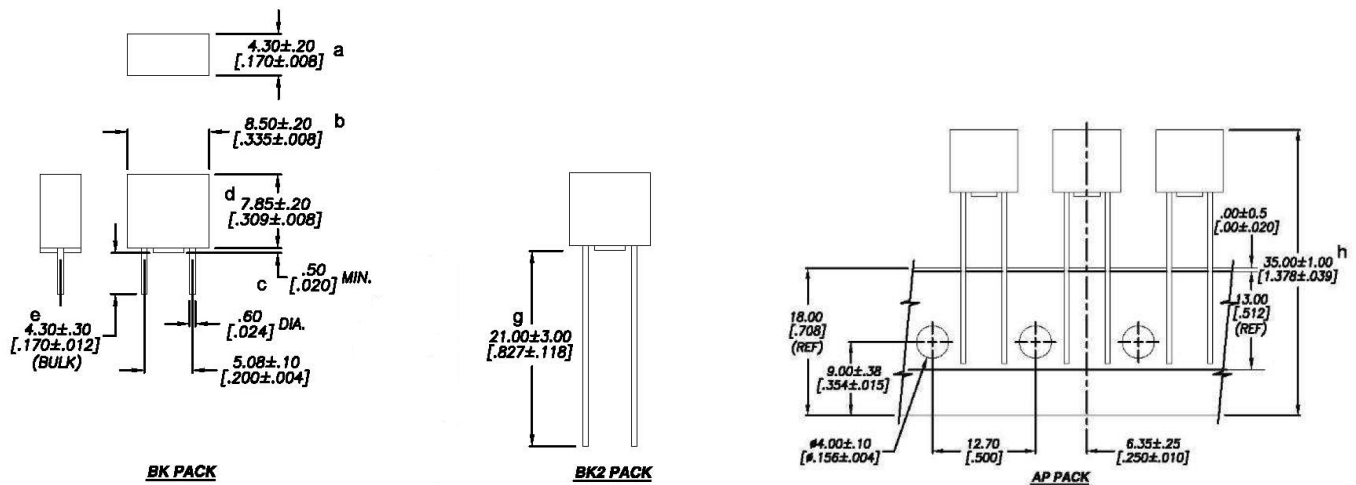
| I_n | $1I_n$ min hour | $1.5I_n$ max minute | $2I_n$ max ms |
|---------------|-----------------------|---------------------------|---------------------|
| 800 mA - 10 A | 4 | 10 | 2 |

Product specifications

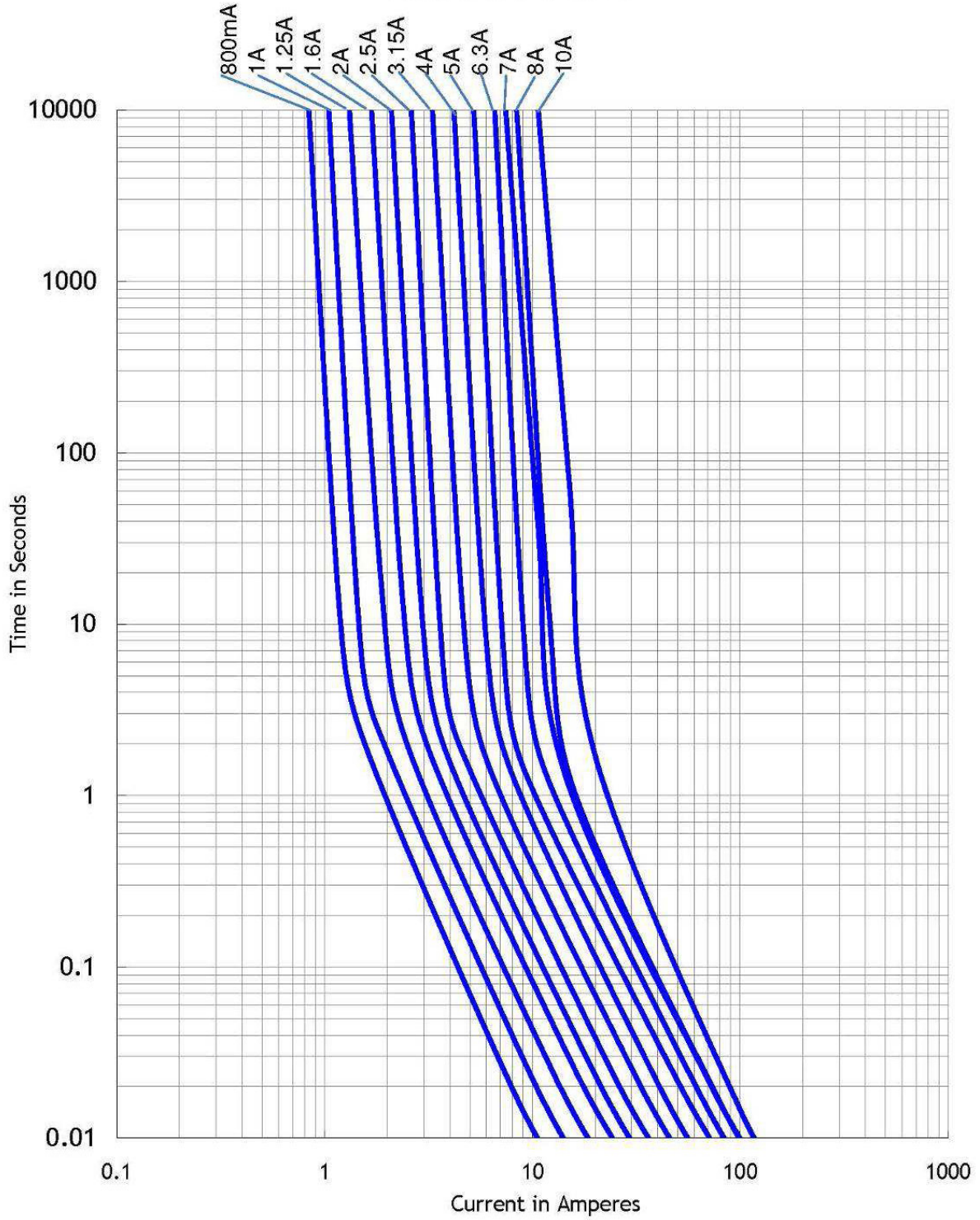
| Part number ⁵ | Current rating (A) | Voltage rating (V _{AC}) | Interrupting rating at rated voltage ¹ (50 Hz) AC (A _{AC}) | Typical DC cold resistance ² (mΩ) | Typical melting ³ I ² t (A ² s) | Typical voltage drop ⁴ (mV) | cULus | PSE+ |
|--------------------------|--------------------|-----------------------------------|---|--|--|--|-------|------|
| SS-5F-800mA | 0.8 | 250 | 50 | 225 | 1.24 | 300 | X | |
| SS-5F-1A | 1.0 | 250 | 50 | 165.5 | 2.22 | 279 | X | X |
| SS-5F-1.25A | 1.25 | 250 | 50 | 116.5 | 3.83 | 244 | X | X |
| SS-5F-1.6A | 1.6 | 250 | 50 | 76 | 6.42 | 210 | X | X |
| SS-5F-2A | 2.0 | 250 | 50 | 55.5 | 9.35 | 194 | X | X |
| SS-5F-2.5A | 2.5 | 250 | 50 | 46 | 14.0 | 201 | X | X |
| SS-5F-3.15A | 3.15 | 250 | 50 | 31.5 | 22.5 | 168 | X | X |
| SS-5F-4A | 4.0 | 250 | 50 | 22.25 | 33.6 | 154 | X | X |
| SS-5F-5A | 5.0 | 250 | 50 | 16 | 53.7 | 154 | X | X |
| SS-5F-6.3A | 6.3 | 125 | 50 | 14.5 | 74.3 | 157 | X | X |
| SS-5F-7A | 7.0 | 125 | 50 | 11.4 | 107 | 133 | X | X |
| SS-5F-8A | 8.0 | 125 | 50 | 9.9 | 107 | 133 | X | X |
| SS-5F-10A | 10 | 125 | 50 | 6.5 | 146 | 109 | X | X |

1. Interrupting ratings: 800 mA to 10 A measured at 50 A, 95%-100% of PF on AC
2. Typical cold resistance measured at <10% of rated current
3. I²t value measured at 10I_n
4. Typical voltage drop measured at 20 °C ambient temperature at rated current
5. Part number definition: SS-5F-xxxA
 SS-5F= Product code
 xxxA= Ampere rating
 xxxmA= Milliampere rating

Dimensions and packaging- mm [in]

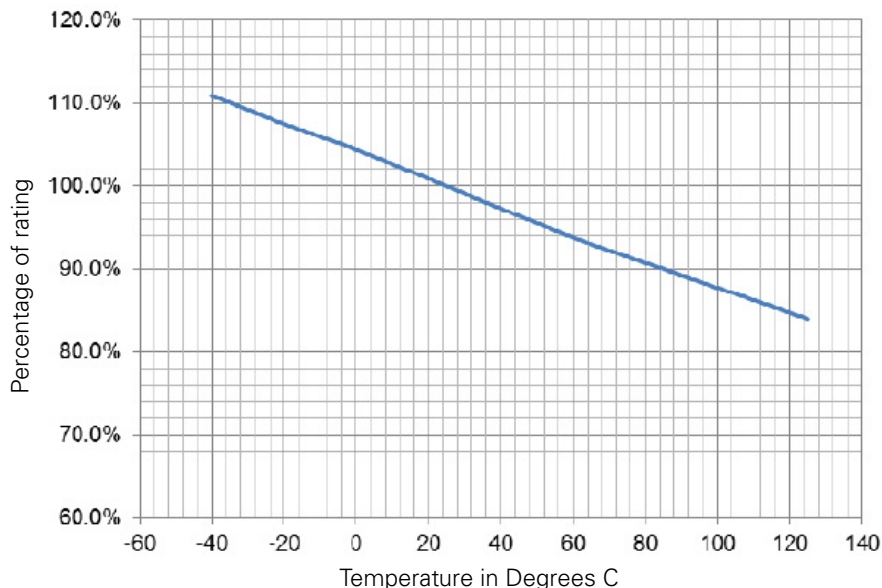


Time vs. current curve



Temperature derating curve

Normal Operating Temperature: 25 °C ± 2 °C



Environmental data

Operating temperature: -40 °C to +125 °C (with derating)

Storage temperature: -10 °C to +40 °C

Solderability: EIA-186-9E Method 9

High Frequency Vibration: Withstands 10 Hz to 55 Hz per MIL-STD-202F, Method 201A

Ordering codes

The ordering code is the part number replacing the "." with a "-" plus adding the packaging suffix.

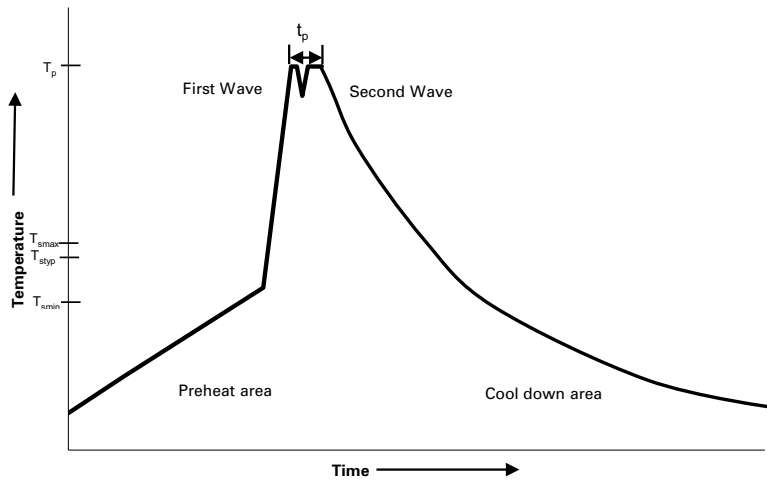
Packaging suffix

- -BK (200 parts in polybag, Lead L= 4.3 ±0.3 mm)
- -BK2 (200 parts in polybag, Lead L= 21 ±3.0 mm)
- -AP (1000 parts Ammo pack, Pitch =12.7 mm)

Ordering Code

| Part number | -BK option | -BK2 option | -AP option |
|-------------|----------------|-----------------|----------------|
| SS-5F-800mA | SS-5F-800mA-BK | SS-5F-800mA-BK2 | SS-5F-800mA-AP |
| SS-5F-1A | SS-5F-1A-BK | SS-5F-1A-BK2 | SS-5F-1A-AP |
| SS-5F-1.25A | SS-5F-1-25A-BK | SS-5F-1-25A-BK2 | SS-5F-1-25A-AP |
| SS-5F-1.6A | SS-5F-1-6A-BK | SS-5F-1-6A-BK2 | SS-5F-1-6A-AP |
| SS-5F-2A | SS-5F-2A-BK | SS-5F-2A-BK2 | SS-5F-2A-AP |
| SS-5F-2.5A | SS-5F-2-5A-BK | SS-5F-2-5A-BK2 | SS-5F-2-5A-AP |
| SS-5F-3.15A | SS-5F-3-15A-BK | SS-5F-3-15A-BK2 | SS-5F-3-15A-AP |
| SS-5F-4A | SS-5F-4A-BK | SS-5F-4A-BK2 | SS-5F-4A-AP |
| SS-5F-5A | SS-5F-5A-BK | SS-5F-5A-BK2 | SS-5F-5A-AP |
| SS-5F-6.3A | SS-5F-6-3A-BK | SS-5F-6-3A-BK2 | SS-5F-6-3A-AP |
| SS-5F-7A | SS-5F-7A-BK | SS-5F-7A-BK2 | SS-5F-7A-AP |
| SS-5F-8A | SS-5F-8A-BK | SS-5F-8A-BK2 | SS-5F-8A-AP |
| SS-5F-10A | SS-5F-10A-BK | SS-5F-10A-BK2 | SS-5F-10A-AP |

Wave solder profile



Reference EN 61760-1:2006

| Profile Feature | Standard SnPb Solder | Lead (Pb) Free Solder |
|-------------------------------------|---|---|
| Preheat | • Temperature min. (T_{smin}) | 100 °C |
| | • Temperature typ. (T_{styp}) | 120 °C |
| | • Temperature max. (T_{smax}) | 130 °C |
| | • Time (T_{smin} to T_{smax}) (t_s) | 70 seconds |
| Δ preheat to max Temperature | 150 °C max. | 150 °C max. |
| Peak temperature (T_p)* | 235 °C to 260 °C | 250 °C to 260 °C |
| Time at peak temperature (t_p) | 10 seconds max 5 seconds max each wave | 10 seconds max 5 seconds max each wave |
| Ramp-down rate | ~ 2 K/s min ~3.5 K/s typ ~5 K/s max | ~ 2 K/s min ~3.5 K/s typ ~5 K/s max |
| Time 25 °C to 25 °C | 4 minutes | 4 minutes |

Manual solder

350 °C, 4-5 seconds (by soldering iron), generally manual hand soldering is not recommended.

Life Support Policy: Eaton does not authorize the use of any of its products for use in life support devices or systems without the express written approval of an officer of the Company. Life support systems are devices which support or sustain life, and whose failure to perform, when properly used in accordance with instructions for use provided in the labeling, can be reasonably expected to result in significant injury to the user.

Eaton reserves the right, without notice, to change design or construction of any products and to discontinue or limit distribution of any products. Eaton also reserves the right to change or update, without notice, any technical information contained in this bulletin.

Eaton
Electronics Division
1000 Eaton Boulevard
Cleveland, OH 44122
United States
www.eaton.com/electronics

© 2016 Eaton
All Rights Reserved
Printed in USA
Publication No. 2622 BU-SB07219
July 2016