Effective July 2016 Supersedes September 2014

BUSSMANN SERIES

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

<u>I,</u>	11 min hour	1.51 max minute	2In max ms	
800 mA - 10 A	4	10	2	

Product specifications

Part number⁵	Current rating (A)	Voltage rating (V _{AC})	Interrupting rating at rated voltage ¹ (50 Hz) AC (A _{AC})	Typical DC cold resistance ² (m Ω)	Typical melting³ I²t (A²s)	Typical voltage drop⁴ (mV)	cULus	PSE+
SS-5F-800mA	0.8	250	50	225	1.24	300	Х	
SS-5F-1A	1.0	250	50	165.5	2.22	279	Х	Х
SS-5F-1.25A	1.25	250	50	116.5	3.83	244	Х	Х
SS-5F-1.6A	1.6	250	50	76	6.42	210	Х	Х
SS-5F-2A	2.0	250	50	55.5	9.35	194	Х	Х
SS-5F-2.5A	2.5	250	50	46	14.0	201	Х	Х
SS-5F-3.15A	3.15	250	50	31.5	22.5	168	Х	Х
SS-5F-4A	4.0	250	50	22.25	33.6	154	Х	Х
SS-5F-5A	5.0	250	50	16	53.7	154	Х	Х
SS-5F-6.3A	6.3	125	50	14.5	74.3	157	Х	Х
SS-5F-7A	7.0	125	50	11.4	107	133	Х	Х
SS-5F-8A	8.0	125	50	9.9	107	133	Х	Х
SS-5F-10A	10	125	50	6.5	146	109	Х	Х

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

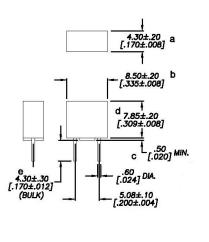
5. Part number definition: SS-5F-xxxA

SS-5F= Product code

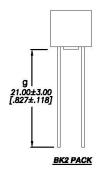
xxxA= Ampere rating

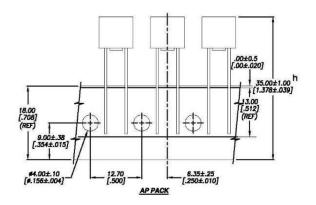
xxxmA= Milliampere rating

Dimensions and packaging- mm [in]

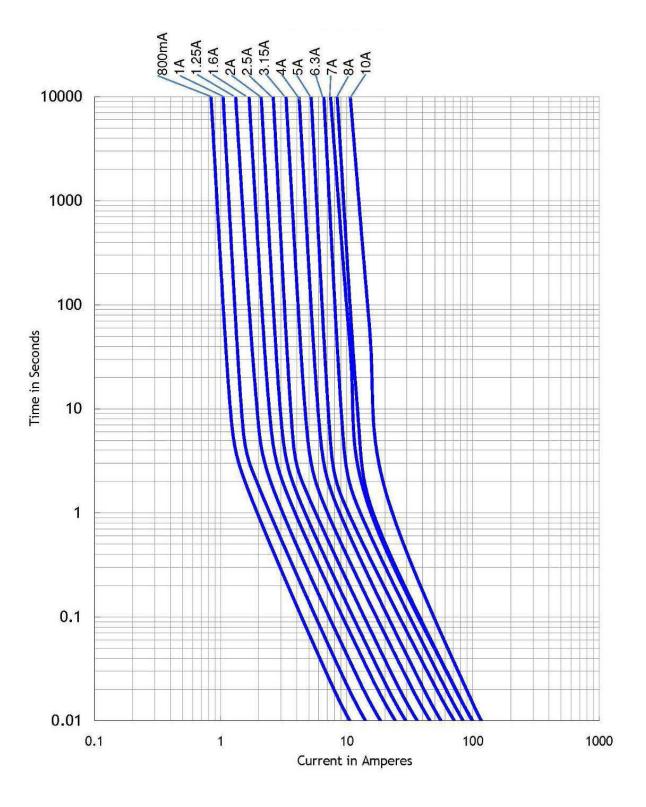


BK PACK

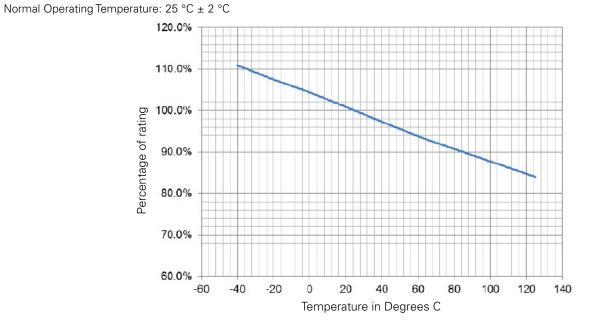




Time vs. current curve



Temperature derating curve



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

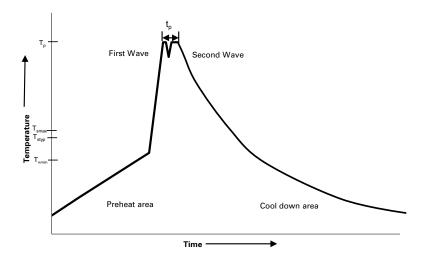
- -BK (200 parts in polybag, Lead L= 4.3 ±0.3 mm)
- -BK2 (200 parts in polybag, Lead L= 21 ±3.0 mm)
- AP (1000 parts Ammo pack, Pitch =12.7 mm)

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-1-25		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	
S-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	
S-5F-6.3A SS-5F-6-3A-BK		SS-5F-6-3A-BK2	SS-5F-6-3A-AP	
S-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	

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Wave solder profile



Reference EN 61760-1:2006

Profile Feature		Standard SnPb Solder	Lead (Pb) Free Solder
Preheat	• Temperature min. (T _{smin})	100 °C	100 °C
	• Temperature typ. (T _{Styp})	120 °C	120 °C
	• Temperature max. (T _{smax})	130 °C	130 °C
	• Time (T _{smin} to T _{smax}) (t _s)	70 seconds	70 seconds
Δ preheat to r	max Temperature	150 °C max.	150 °C max.
Peak temperat	ture (Tp)*	235 °C to 260 °C	250 °C to 260 °C
Time at peak t	temperature (t _p)	10 seconds max 5 seconds max each wave	10 seconds max 5 seconds max each wave
Ramp-down ra	ate	~ 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.

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