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> n	1l min hour	1.5l _n 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 voltage¹ (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	Χ	
SS-5F-1A	1.0	250	50	165.5	2.22	279	Χ	Χ
SS-5F-1.25A	1.25	250	50	116.5	3.83	244	Χ	Χ
SS-5F-1.6A	1.6	250	50	76	6.42	210	Χ	Χ
SS-5F-2A	2.0	250	50	55.5	9.35	194	Χ	Χ
SS-5F-2.5A	2.5	250	50	46	14.0	201	Χ	Χ
SS-5F-3.15A	3.15	250	50	31.5	22.5	168	Χ	Χ
SS-5F-4A	4.0	250	50	22.25	33.6	154	Χ	Χ
SS-5F-5A	5.0	250	50	16	53.7	154	Χ	Χ
SS-5F-6.3A	6.3	125	50	14.5	74.3	157	Χ	Χ
SS-5F-7A	7.0	125	50	11.4	107	133	Χ	Χ
SS-5F-8A	8.0	125	50	9.9	107	133	Χ	Χ
SS-5F-10A	10	125	50	6.5	146	109	Χ	Χ

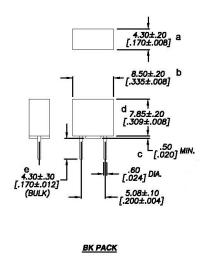
- 1. Interrupting ratings: 800 mA to 10 A measured at 50 A, 95%-100% of PF on AC
- 2. Typical cold resistance measured at <10% of rated current
- 3. I2t value measured at 10I
- 4. Typical voltage drop measured at 20 °C ambient temperature at rated current
- 5. Part number definition: SS-5F-xxxA

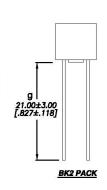
SS-5F= Product code

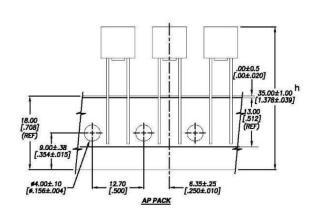
xxxA= Ampere rating

xxxmA= Milliampere rating

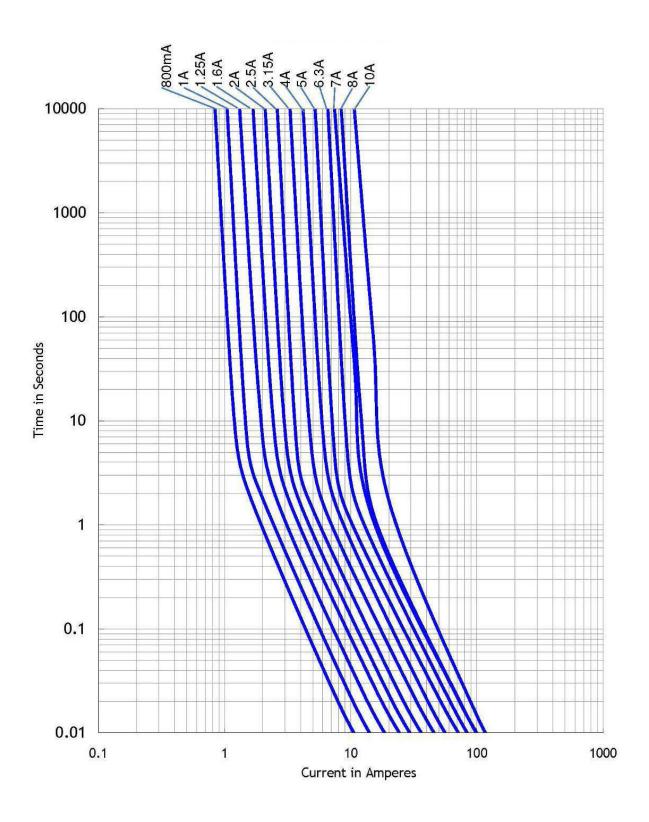
Dimensions and packaging- mm [in]





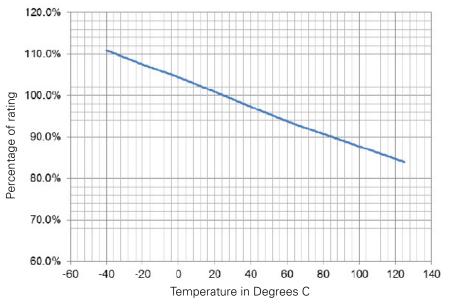


Time vs. current curve



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.

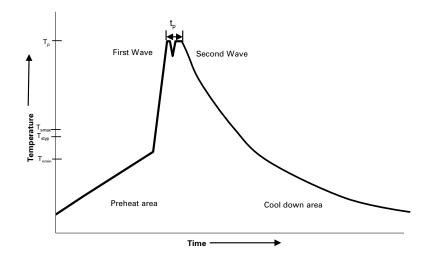
Packaging suffix

- -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-AP			
SS-5F-800mA	SS-5F-800mA-BK	SS-5F-800mA-BK2				
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-BK SS-5F-4A-BK2				
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			
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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 max Temperature		150 °C max.	150 °C max.	
Peak temperature (Tp)*		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.

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