

The SPS(Smart protector SMD type Fuse) is a very small, Wire-in-Air square shape surface mount fuse which is very suitable for the secondary side circuit over-current protection applications.

● Features

- Fast acting, Inrush withstand capability
- Wire-In-Air performance
- Wide range of current rating available
- 6.1mmx 2.5mm square shape surface mount
- Higher temperature profiles
 - 50℃~125℃ operating temperature
- Excellent environmental integrity
- RoHS compliant
- Halogen-free

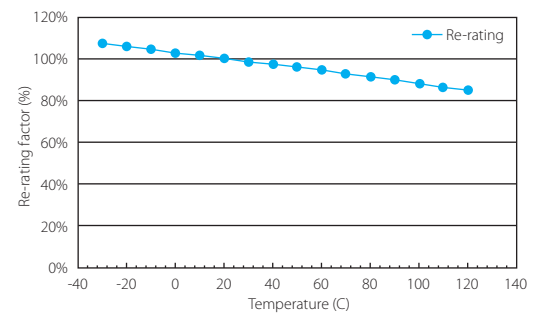
● Interrupting Ratings

- All range (1A ~ 15A) : 32Vdc, 50A

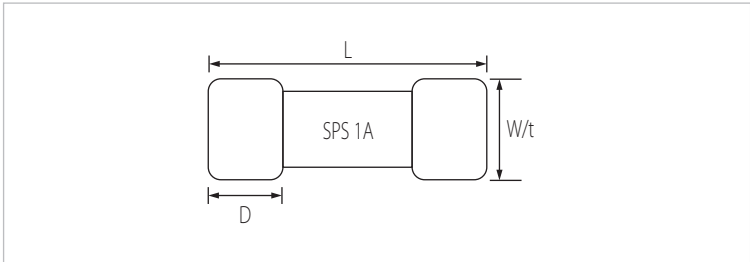
● Ampere Rating

Amperage Rating	% of Ampere Rating	Opening Time
1A-20A	100%	4hr, Min.
1A-10A	200%	5sec, Max.
12A-20A	200%	20sec, Max.
1A~20A	1000%	1ms-10ms

● Temperature Rating Curve



● Dimension



Dimension (mm)			
L	W	t	D
6.1±0.2	2.5±0.1	2.5±0.1	1.4±0.1

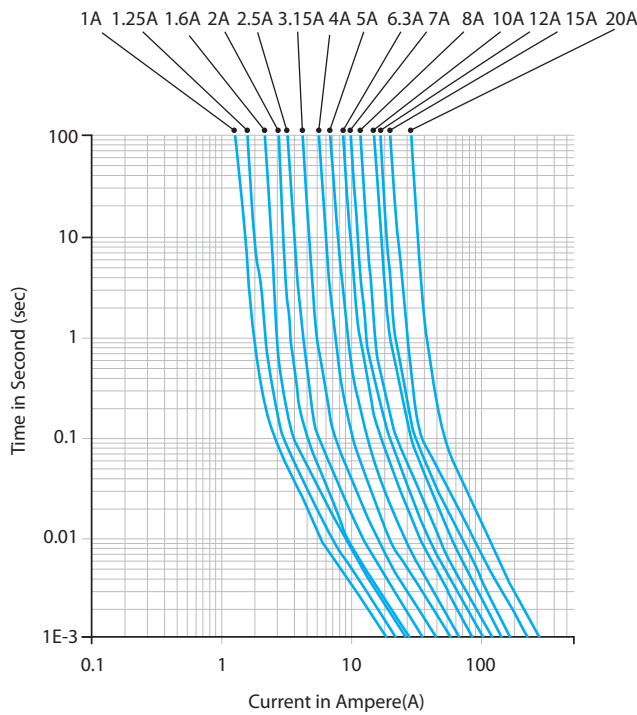
● Type Designation

SPS	125	F	T	1A00
Products Code	Voltage Rating	Characteristic	Style (breaking)	Ampere Rating
	125:125V 65:65V	F : Fast-Acting Type	T : Taping Type	1A00 : 1A

● Agency Approval

Agency	Item	File No.
	SPS 125V 1A ~ 10A	E238986
	SPS 65V 12A ~ 15A	

● Average Time Current Curve



● Characteristic

Part Number	Ampere Rating (A)	Voltage Rating (V)	Nominal Resistance Cold Ohms (mΩ)	Normal Melting I ² T (A ² sec)	Operation Temperature (℃)
SPS 1A00	1	125	100	0.355	-55~125
SPS 1A25	1.25		89	0.481	
SPS 1A60	1.6		58	0.847	
SPS 2A00	2.0		32	0.84	
SPS 2A50	2.5		27	1.403	
SPS 3A15	3.15		21	2.054	
SPS 4A00	4		16	3.44	
SPS 5A00	5		14	4.843	
SPS 6A30	6.3		10	10.558	
SPS 7A00	7		9.4	10.584	
SPS 8A00	8		7.4	17.628	
SPS 10A0	10		5.9	30.3	
SPS 12A0	12	65	4.8	42.221	
SPS 15A0	15		3.7	69.763	
SPS 20A0	20		3	132	

● Performance

Test Items	Test condition/Methods	Performance
Voltage Drop	100% of its rated current	1~6.3A<300mv 7~10A<220mv 12A~20A<150mv
Endurance Test	125% of its rated current	1~6.3A<70℃ 7~10A<85℃
	100% of its rated current	12~20A<105℃
Interrupting Ability	50A/125V AC 160V DC(1A~10A) 50A/65V AC/DC(12A~20A)	Without permanent arcing, ignition and bursting of fuse link
Solder Ability	240℃±5℃, 3s±0.5s	95% coverage min.
Resistance to Soldering	260℃±5℃, 10s±0.5s	ΔR:<10%
High Temperature Operating Life	T=70±2℃, 0.6In, 96h	ΔR:<10%
Humidity (Steady state)	T=40±2℃, 90~95%RH, 1000h	ΔR:<10%
Low Temperature Storage	T=-55±3℃, 96h	ΔR:<10%
High Temperature Storage	T=125±2℃, 96h	ΔR:<10%
Salt Spray	5% salt solution, 48h	ΔR:<10%
Thermal Shock	5 cycles between -55℃/+125℃, 60 minutes ; each extreme	ΔR:<±(10%R±0.005)