




General

- Slow Blow, Inrush withstand capability
- Surface mount high current fuse
- Higher voltage rating up to 84VDC
- 12.10mm×4.50mm square shape surface mount
- -55°C to 125°C Operating temperature
- Excellent environmental integrity
- Enhanced thermal cycling endurance
- Halogen Free

Agency / Certificate Information

Agency	File Number	Ampere Range
	E319512	60A

Application

- Storage system power
- Cooling fan system for PC server
- Voltage regulator module
- Base station power supply
- Voltage regulator module for PC server
- High end servers / Blade computing
- Battery Management System

Electrical Specifications

Part Number	Current Rating (A)	Voltage Rating (VDC)	Interrupting Rating	Typical Cold DCR* (mΩ)	Nominal i^2t^{**} (A ² sec)
S1245-S-60A	60	84	480A @ 84VDC 1000A @ 72VDC	0.60	6500

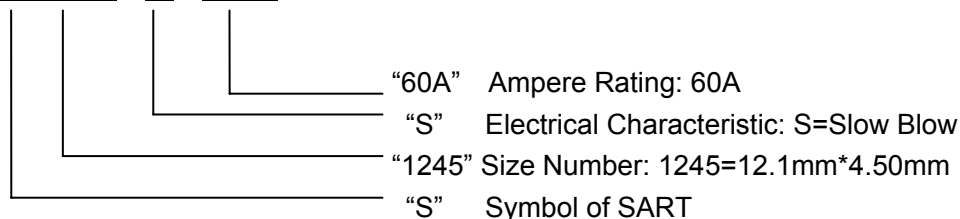
* Measured at ≤10% rated current and 25°C

** Melting i^2t at 10 times of rated current

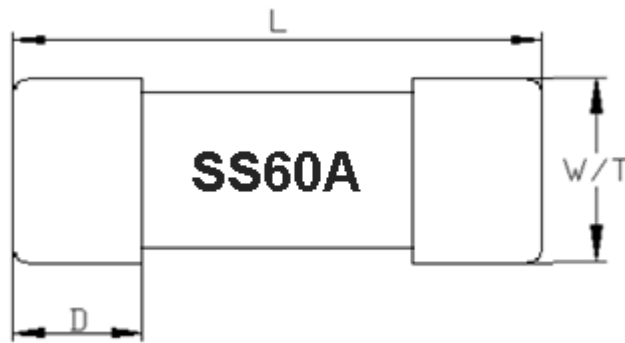
The resistance needs to be tested by placing product-mark facing upwards, and using the test fixture to clamp both sides of the end cap.

Part Number Information

S1245-S-60A

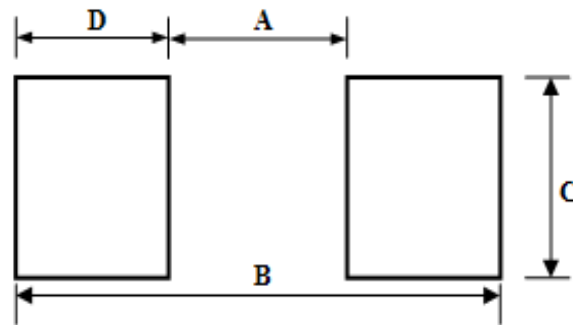


Dimensions



Type	L (mm)	W/T(mm)	D (mm)
S1245-S	12.10±0.50	4.50±0.30	2.70±0.20

Recommended Land Patterns

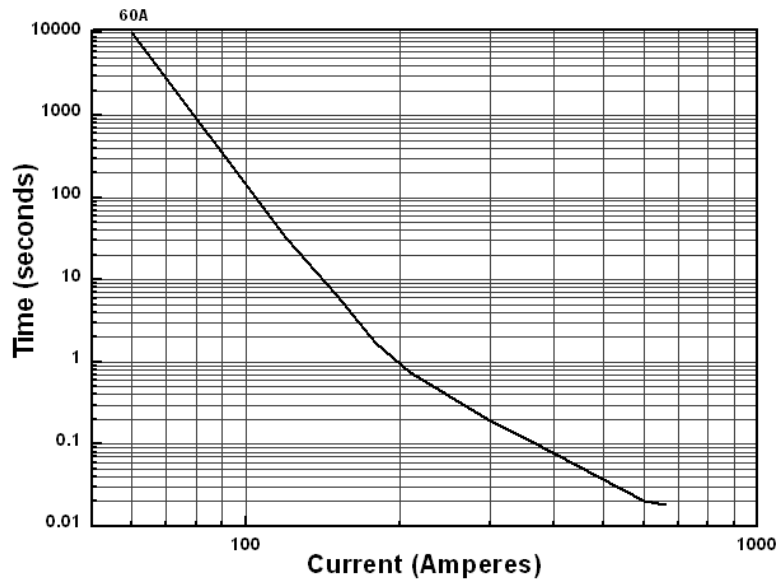


Type	A(mm)	B (mm)	C(mm)	D(mm)
S1245-S	5.80±0.30	14.00±0.30	5.70±0.30	4.10±0.30

Materials

Components	Material
Body	Ceramic
Cap	Au Plated Brass

Time Current Curve

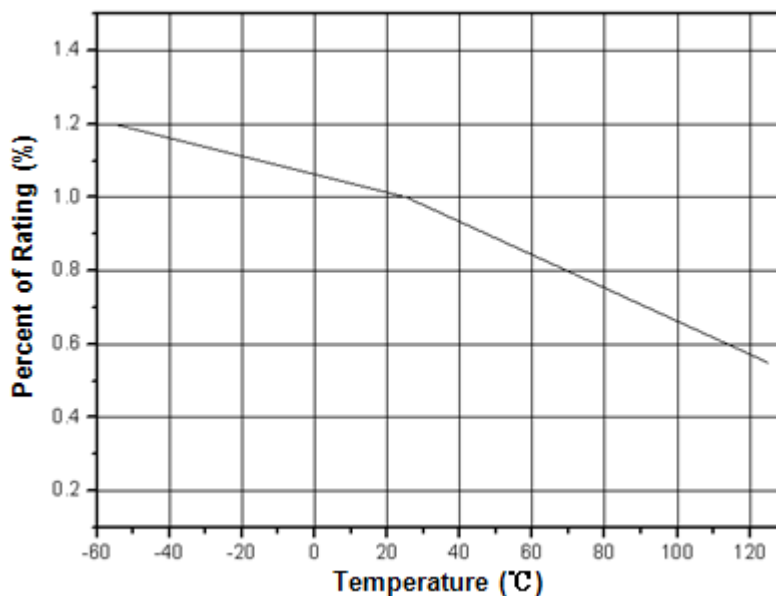


Electrical Characteristics

Type	Ampere Rating	% of Current Rating	Opening Time
S1245-S	60A	100%	Min.4hours
	60A	350%	Max. 10 sec
	60A	1000%	Min. 10msec

Disclaimer Notice: This product is designed for system short circuit protection application with minimum protection current of 3.5In.

Temperature Derating Curve



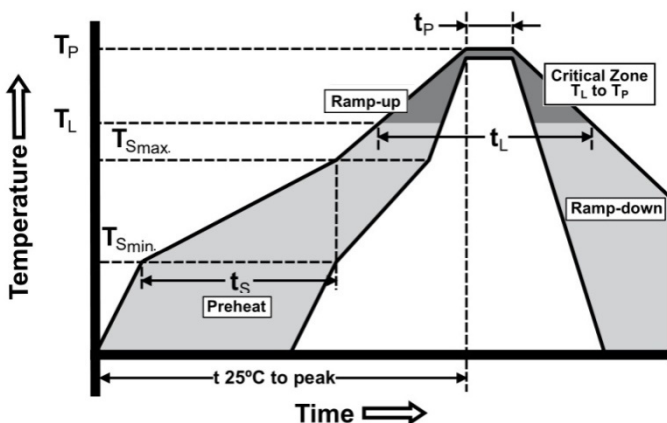
Product Characteristics

Item	Test condition/ Methods	Standard
Insulation Resistance	Test Condition A, 0.01MΩ Min.	MIL-STD-202 Method 302
Solderability	240°C±5°C, 3sec±0.5sec	MIL-STD-202 Method 208
Resistance to Soldering Heat	Test Condition B	MIL-STD-202 Method 210
Moisture Resistance	High Humidity (90-98%RH), Heat (65°C)	MIL-STD-202 Method 106
Moisture Sensitivity Level	Level 1	J-STD-020
Salt Spray	Test Condition B	MIL-STD-202 Method 101
Thermal Shock	Test Condition B: 5 cycles, -65°C to +125°C	MIL-STD-202 Method 107
Vibration	10Hz-55Hz	MIL-STD-202 Method 201
Mechanical shock	Test Condition I (100 G's peak for 6 msec)	MIL-STD-202 Method 213

Recommended Solder Curve

1. Infrared Reflow:

- Temperature: 260°C
- Time: 20sec Max.
- Recommend Reflow profile



Profile Feature	Pb-Free Assembly
Average Ramp-Up Rate(T_{Smax} to T_P)	3°C/sec Max.
Preheat Temperature Min(T_{Smin}) Temperature Max(T_{Smax}) Time(t_{Smin} to t_{Smax})	150°C 200°C 60sec ~ 120sec
Peak Temperature(T_P)	260°C
Time within 5°C of actual Peak Temperature(t_P)	20sec
Temperature (T_L)	217°C
Melting tin time(t_L)	60sec ~ 150sec
Ramp-Down Rate	6°C/sec Max.
Time 25°C to Peak Temperature	8 min Max.



Packaging

1500 pieces of fuses on 24mm tape-and-reel on 13 inch (330mm) reel

Storage

- The ambient temperature recommended for storage shall be between 5°C~30°C.
- The relative humidity recommended for storage shall be between 25%RH~60%RH.
- Sealed plastic bags with desiccant shall be used to reduce the oxidation of the termination and shall only be opened prior to use.
- The products shall not be stored in areas where harmful gases containing sulfur or chlorine are present.