




## General

- Fast acting
- Surface mount high current fuse
- Higher voltage rating up to 85VDC
- 7.3mm×5.8mm×4.2mm rectangle shape surface mount
- -55°C to 125°C Operating temperature
- Excellent environmental integrity
- Enhanced thermal cycling endurance
- RoHS compliant
- Halogen Free
- Pb Free

## Agency / Certificate Information

Agency	File Number	Ampere Range
	E527955	20A~125A

## 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

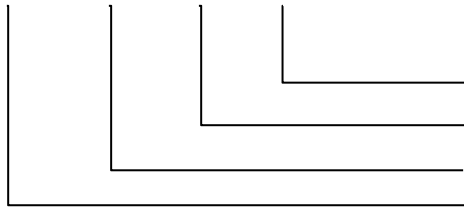
Part Number	Current Rating (A)	Voltage Rating (V)	Interrupting Rating	Typical Cold DCR* (mΩ)	Typical I <sup>2</sup> T** (A <sup>2</sup> sec)
S7358-F-20A	20	85	DC85V1500A	2.40	231
S7358-F-30A	30	85	DC85V1500A	1.23	400
S7358-F-40A	40	85	DC85V1500A	0.88	812
S7358-F-50A	50	85	DC85V1500A	0.72	1180
S7358-F-60A	60	85	DC85V1500A	0.60	1700
S7358-F-80A	80	85	DC85V1500A	0.50	3000
S7358-F-100A	100	85	DC85V1500A	0.45	4400
S7358-F-125A	125	85	DC85V1500A	0.35	8200

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

\*\* Melting I<sup>2</sup>T at 10 times of rated current

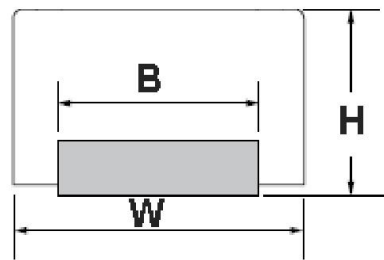
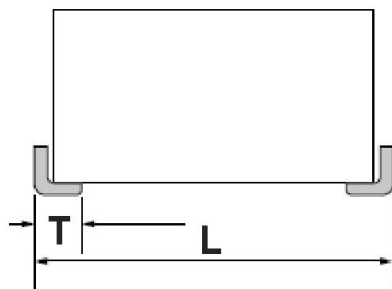
### Part Number Information

S 7358 - F - 40A



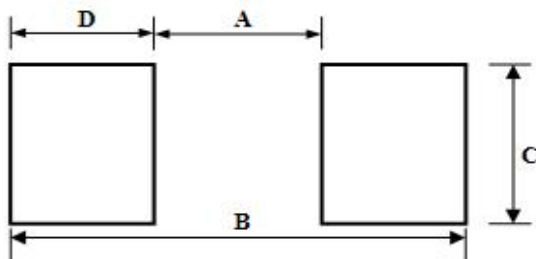
"40A" Ampere Rating: 40A  
" F " Electrical Characteristic: F=Fast Acting  
"7358" Size Number: 7358=7.3mm\*5.8mm  
" S " Symbol of SART

### Dimensions



Type	L (mm)	W (mm)	H (mm)	T (mm)	B (mm)
S7358-F	7.30±0.50	5.80±0.30	4.20±0.30	1.00±0.30	4.00±0.30

### Recommended Land Patterns



### Materials

Components	Material
Body	Ceramic
Element	Tin Plated Copper

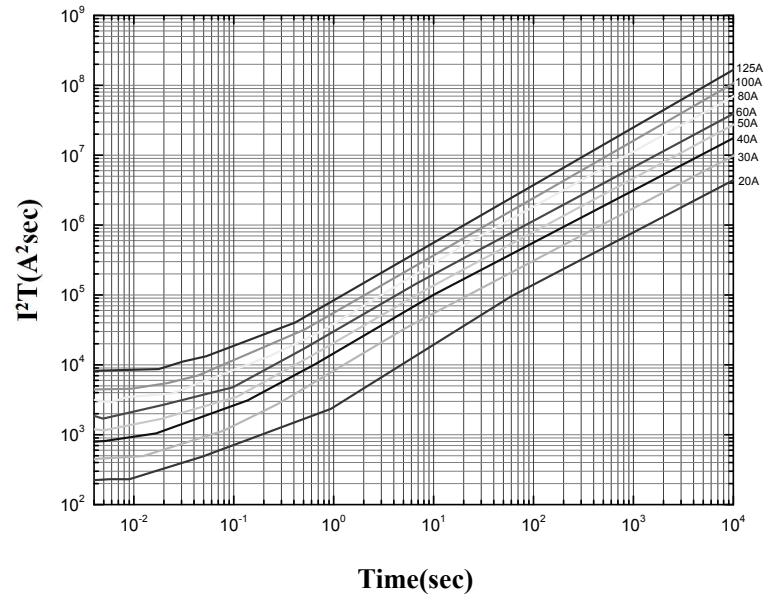
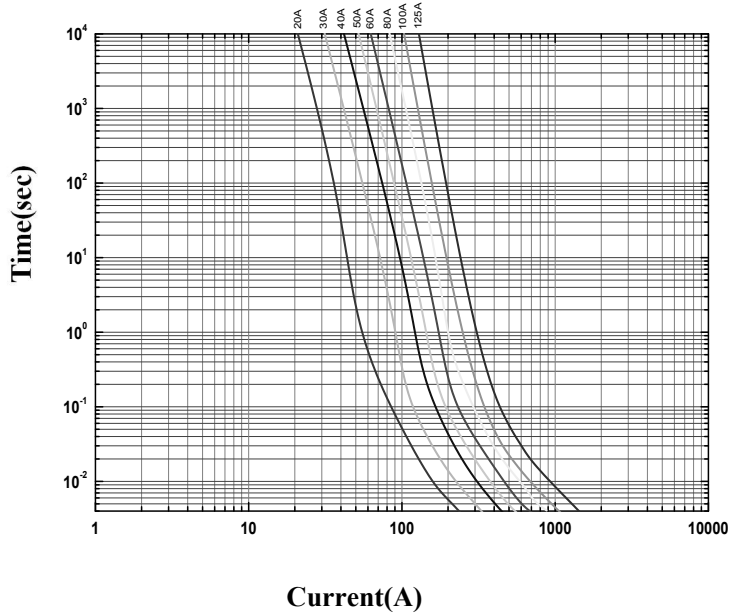
Type	A(mm)	B(mm)	C(mm)	D(mm)
S7358-F	4.40±0.30	9.80±0.30	5.80±0.30	2.70±0.30

### Dimensions of Standard Test Board

Type	Ampere Rating	Board Thickness (mm)	Copper Layer Thickness (mm)	Copper Trace Width (mm)
S7358-F	20A~50A	1.6	0.105	22
	60A~125A	1.6	0.210	33

**Time Current Curve**

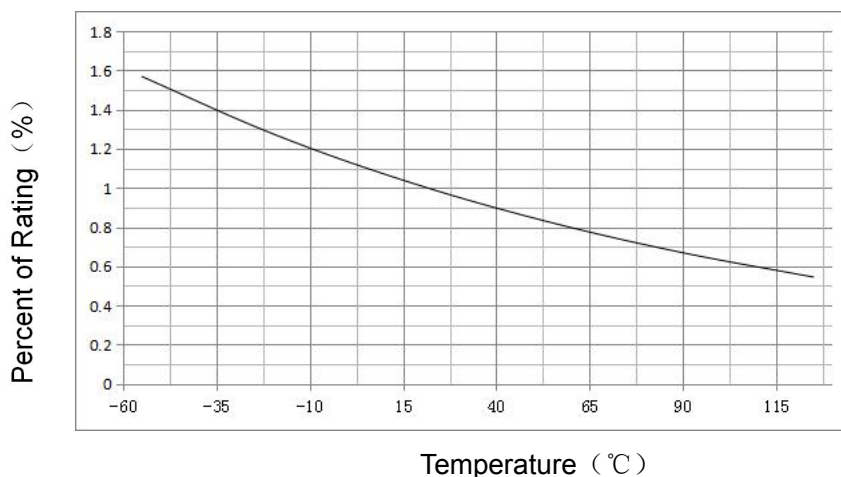
**I<sup>2</sup>T VS Time Curve**



**Electrical Characteristics**

Type	Ampere Rating	% of Current Rating	Opening Time
S7358-F	20A~125A	100	4hours Min.
	20A~125A	250	60sec Max.
	20A~125A	1000	1msec Min.

**Temperature Derating Curve**



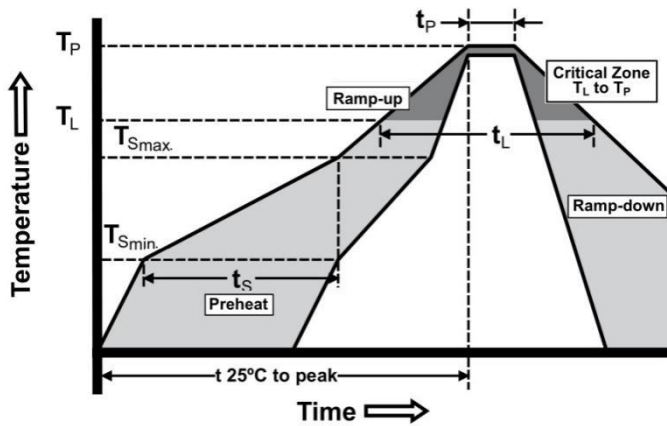
## Product Characteristics

Item	Test condition/ Methods	Performance	Standard
Time/Current	100% of current rating	No Fusing, 4hours Min.	UL248-14
	250% of current rating	$\leq 60\text{sec}$	SART SPEC
	1000% of current rating	$\geq 1\text{msec}$	IEC60127-4
Solderability	240°C±5°C, 3sec±0.5sec	95% coverage Min.	IEC60127-4 IEC60068-2-20; MIL-STD-202
Insulation Resistance	Test Condition A, 0.01MΩ Min.	0.01MΩ Min.	MIL-STD-202 Method 302
Resistance to Soldering	260°C±5°C, 10sec±0.5sec	$ \Delta R : <10\%$	MIL-STD-202 Method 210
Interrupting Ability	DC85V1500A	without permanent arcing, ignition and bursting of fuse link	UL248-14 IEC60127-4
Moisture Resistance	Temperature Humidity, T: 85°C ± 3°C, RH: 85%±5%, Duration: 1000 hours	$ \Delta R : <10\%$	MIL-STD-202 Method 106
Moisture Sensitivity Level	Level 1	$ \Delta R : <10\%$	J-STD-020
Salt Spray	5% salt solution, 72 hours	$ \Delta R : <10\%$	MIL-STD-202 Method 101
Thermal Shock	Test Condition B: 300 cycles, -65°C to +125°C	$ \Delta R : <10\%$	MIL-STD-202 Method 107
Vibration	Amplitude 10Hz~55Hz in 1 min. 2 hours each XYZ, total 6 hours	$ \Delta R : <10\%$	MIL-STD-202 Method 201
Mechanical shock	Test Condition I (100 G's peak for 6 msec)	$ \Delta R : <10\%$	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	8min Max.

## Packaging

1000 pieces of fuses on 16mm 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.