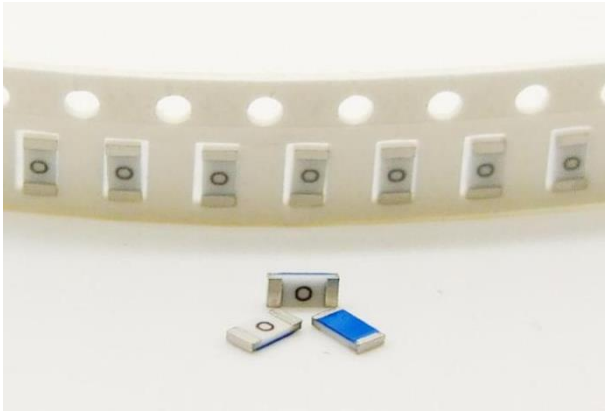


General

- Slow Blow
- 3.10mm× 1.55mm physical size
- Thick film manufacturing method, ceramic substrate, silver fusing element
- -55℃~125℃ operating temperature
- Excellent environmental integrity
- RoHS compliant
- Halogen-free
- Lead free

Agency / Certificate Information

Agency	File Number	Ampere Range
c UL us	E319512	0.5A~7A

Application

- Battery pack
- PC related equipment and peripherals (Hard driver, Printer, etc.)
- Digital camera (Digital still camera)
- Game equipment
- LCD monitor, LCD modules
- Wireless base station
- Power supply
- Medical device

Electrical Specifications

Part Number	Marking	Current Rating (A)	Voltage Rating (V)	Interrupting Rating (V)	Typical Cold DCR* (mΩ)	Typical I^2T** (A^2s)
S1206-SD-0.5A	F	0.5	63	50A 63V DC 50A 63V AC	1200	0.0075
S1206-SD-0.75A	G	0.75	63		540	0.0169
S1206-SD-1.0A	H	1.0	63		320	0.245
S1206-SD-1.5A	K	1. 5	63		140	0.294
S1206-SD-2.0A	N	2.0	63		92	0.788
S1206-SD-2.5A	O	2.5	63		65	1.149
S1206-SD-3.0A	P	3.0	63		36	2.300
S1206-SD-3.5A	R	3.5	63		30	2.563
S1206-SD-4.0A	S	4.0	63		23	3.667
S1206-SD-5.0A	T	5.0	63		16	4.260
S1206-SD-6.0A	6	6.0	63		12.5	9.848
S1206-SD-7.0A	U	7.0	63		7.0	11.176

* Measured at≤10% rated current and 25℃
** Melting I^2T at 10 times of rated current

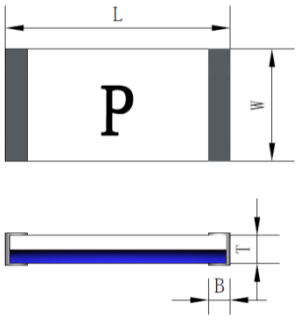
Nanjing SART Science &Technology Development Co., ltd or ANT Technology Company Limited.（A Wholly Owned Subsidiary）
ADD.:Maqun Science & Technology Park, Qingma Road 6#, Nanjing, China
TEL.:086-25-84354852-8015 FAX.:086-25-83241791 Web.: www.sartfuse.com

Part Number Information

S 1206–SD–3.0A

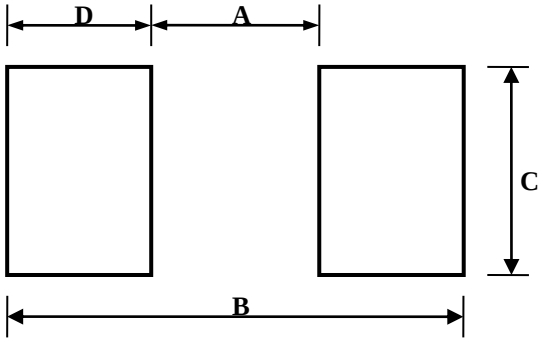
- "3.0A" Ampere Rating: 3A
- " SD" Electrical Characteristic: S = Slow Blow, D = 63V
- "1206" Size Number
- " S" Symbol of SART

Dimensions



Type	L (mm)	W (mm)	T (mm)	B (mm)
S1206-SD	3.10±0.20	1.55±0.20	0.55±0.20	0.50±0.20

Recommended Land Patterns



Materials

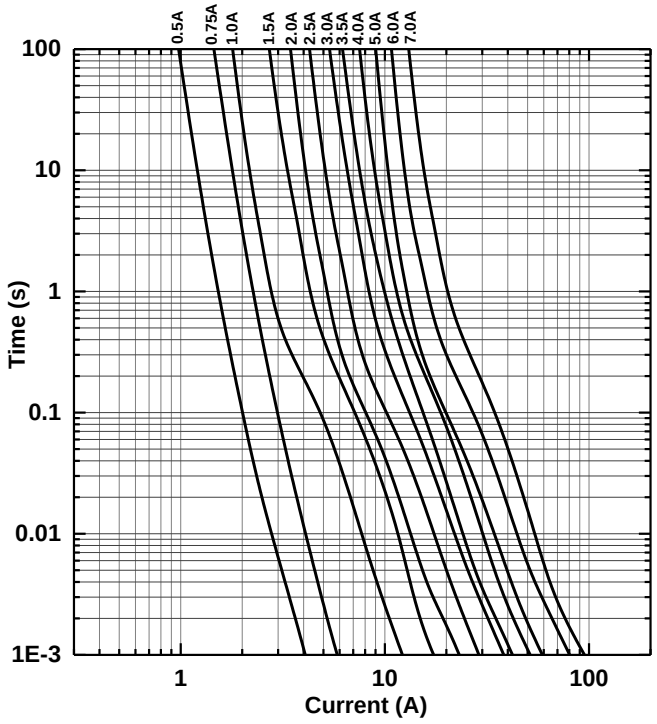
Components	Material
Body	Ceramic
Terminations	Silver over plated with tin (100%)
Element	Silver or Silver/Palladium

Dimensions	A(mm)	B(mm)	C(mm)	D(mm)
Spec	2.00±0.30	4.40±0.50	2.40±0.30	1.20±0.30

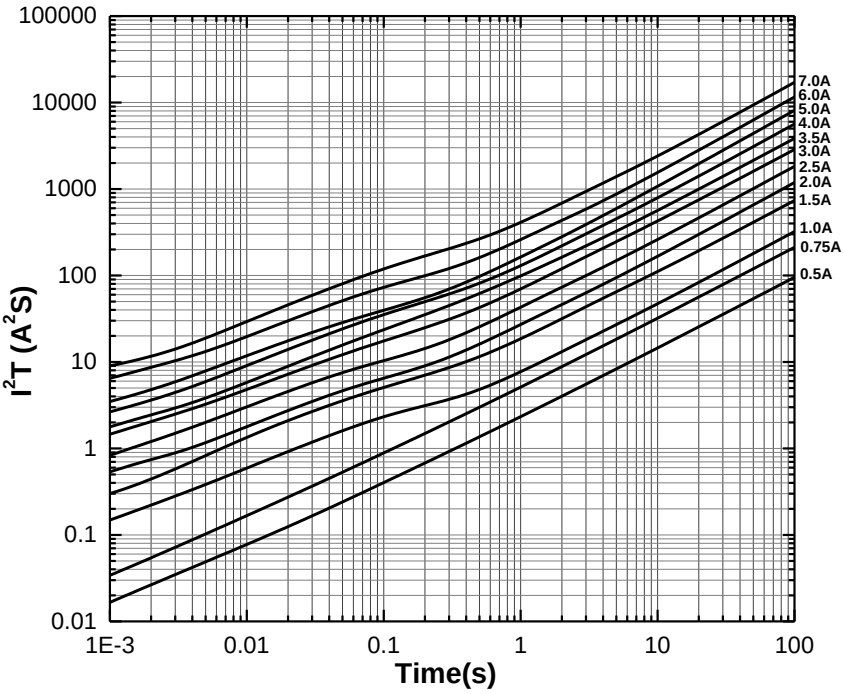
Dimensions of Standard Test Board

Type	Ampere Rating	Board Thickness (mm)	Copper Layer Thickness (mm)	Copper Trace Width (mm)
S1206-SD	0.5A~6.0A	1.6	0.035	5.0
	7.0A	1.6	0.070	7.5

Time Current Curve



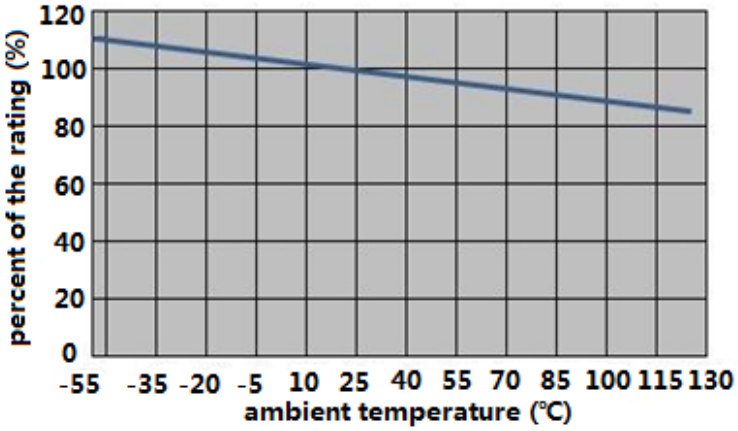
I^2T VS Time Curve



Electrical Characteristics

Type	Ampere Rating	% of Current Rating	Opening Time
S1206-SD	0.5A~7.0A	100	＞4hours
	1.0A~7.0A	200	≤60sec
	0.5A~0.75A	250	≤20sec
	0.5A~0.75A	1000	＞0.1ms
	1.0A~7.0A	1000	＞1.0ms

Temperature Derating Curve



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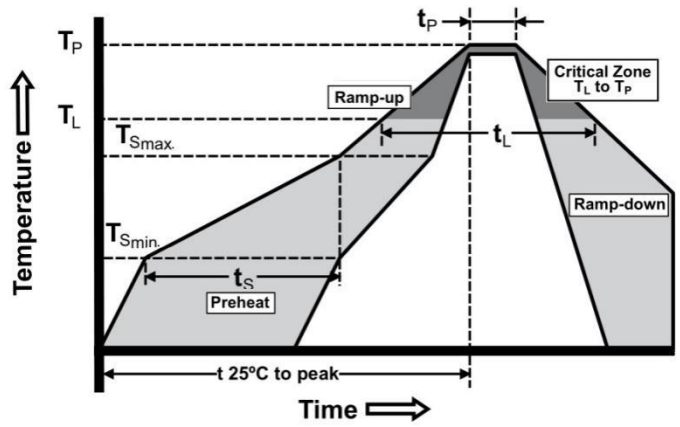
Product Characteristics

Item	Test condition/ Methods	Performance	Standard
Time/Current	100% of current rating	No Fusing, 4hours Min.	UL248-14
	200% of current rating	1.0A~7.0A:≤60sec	SART SPEC.
	250% of current rating	0.5A~0.75A:≤20sec	
	1000% of current rating	0.5A~0.75A:＞0.1ms 1.0A~7.0A:＞1.0ms	IEC60127-4
Voltage Drop	100% of current rating	Deviation between the mean value: ＜15%	IEC60127-4
Temperature Rise	100% of current rating	△T＜75℃	IEC60127-4
Endurance Test	100 cycles of 1In for 1h “ON”, for 15min “OFF”, then following by 1h of 125%In	|△R|:＜10%	IEC60127-4
Interrupting Ability	50A 63V DC 50A 63V AC	without permanent arcing, ignition and bursting of fuse link	UL248-14 IEC60127-4
Solderability	240℃±5℃, 3sec±0.5sec	95% coverage Min.	IEC60127-4 MIL-STD-202 Method 208
Resistance to Soldering	260℃±5℃, 10sec±0.5sec	|△R|:＜10% Legible appearance	MIL-STD-202 Method 210
Bending Test	Distance between holding points: 90mm Bending: 1mm, time: 10sec	|△R|:＜10% No mechanical damages	IEC60127-4
High Temperature Operating Life	T=70℃±2℃, 60%In, 96hours	|△R|: ＜10%; No fusing	MIL-STD-202 Method 108
Humidity (Steady State)	T=40℃±2℃, 90%～95%RH, 1000hours	|△R|: ＜10%	MIL-STD-202 Method 103
Low Temperature Storage	T=-55℃±3℃，96hours	|△R|: ＜10%	IEC60068-2-1
High Temperature Storage	T=125℃±2℃，96hours	|△R|: ＜10%	IEC60068-2-2
Salt Spray	5% salt solution，48hours	|△R|: ＜10% Legible appearance	MIL-STD-202 Method 101
Thermal Shock	100 cycles between -65℃/+125℃ 60 minutes, each extreme	|△R|: ＜10%R No mechanical damages	MIL-STD-202 Method 107

Recommended Solder Curve

1. Infrared Reflow:
   - Temperature: 260℃
   - Time: 5sec Max.
   - Recommend Reflow profile



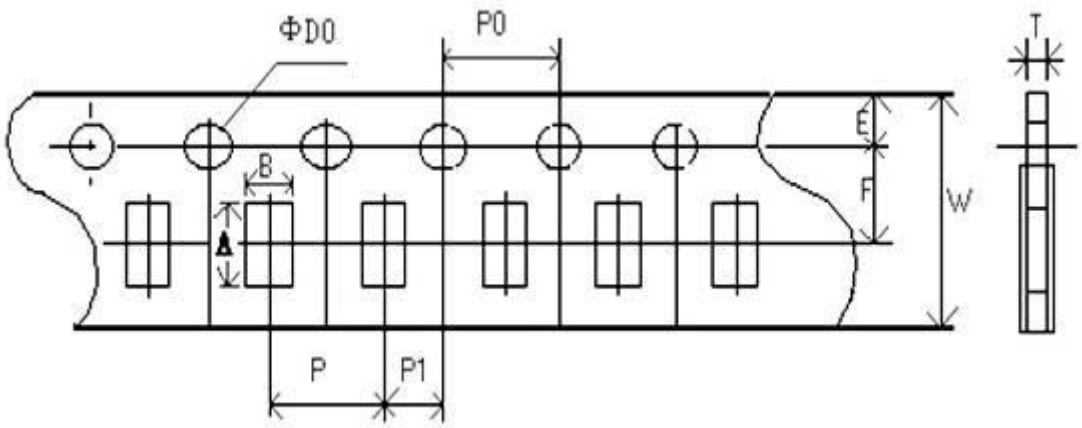
Profile Feature	Pb-Free Assembly
Average Ramp-up Rate(Ts_{max} to Tp)	3℃/sec Max.
Preheat Temperature Min.(Ts_{min}) Temperature Max.(Ts_{max}) Time(Ts_{min} to Ts_{max})	150℃ 200℃ 60sec~120sec
Peak Temperature(Tp)	260℃
Time within 5℃ of actual Peak Temperature(Tp)	5sec
Melting tin time(T_L)	20sec~30sec
Ramp-down Rate	6℃/sec Max.
Time 25℃ to peak Temperature	8minutes Max.

2. Wave soldering
   - Reservoir Temperature: 260℃
   - Time in Reservoir: 10secMax.

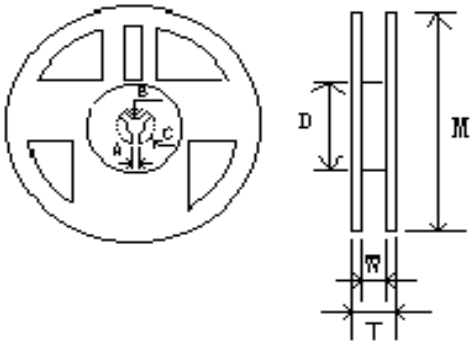
3.Hand Soldering
   - Temperature: 350℃
   - Time: 5secMax.

Packaging

- 5000 pieces of fuses in emboss taper and reeled on a 178mm(7 inch) reel.



Type	A(mm)	B(mm)	W(mm)	E(mm)	F(mm)
Spec	3.50±0.20	1.90±0.20	8.00±0.20	1.75±0.10	3.50±0.05
Type	P(mm)	P0(mm)	P1(mm)	D0(mm)	T(mm)
Spec	4.00±0.10	4.00±0.10	2.00±0.10	1.50±0.10	0.75±0.10



Type	M(mm)	W(mm)	T(mm)	A(mm)	B(mm)	C(mm)	D(mm)
Spec	178.00±2.00	9.50±1.00	12.50±1.50	2.00±0.50	13.00±0.50	21.00±0.50	58.00±2.00

Storage

- The ambient temperature recommended for storage shall be between 5℃~30℃
- 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