

PxxxxSA SERIES

Power Transient Voltage Suppressor

Description:

thyristor surge protector devices are designed to help protect sensitive telecommunication equipment from the hazards caused by lightning, power contact, and power induction.



Feature:

- Bi-directional crowbar transient voltage protection
- High surge capability
- High off-state impedance, Low leakage current
- Short-circuit failure mode
- Central office switching equipment, Analog and digital linecards (xDSL, T1/E1, ISDN...).
- Customer Premises Equipment (CPE) such as phones, fax machines, modems, POS terminals, PBX systems and caller ID adjunct boxes.
- Primary protection modules including Main Distribution Frames (MDF), building entrance equipment and station protection modules.
- Access network equipment such as remote terminals, line repeaters, multiplexers, cross-connects, Salltech equipment, Network Interface Devices (NID).
- Data lines and security systems.
- CATV line amplifiers and power inserters.
- Sprinkler systems.
- Packaging : Tape and Reel per EIA-481
- RoHS compliant

Electrical Parametrs(T=25°C)

Part Number	V _{DRM}	I _{DRM}	V _{BO}	I _{BO}	V _T	I _T	C _O	I _H	I _{PP}
	Max.	Max.	Max.	Max.	Max.	Max.	Max	Min.	10/1000μs
	V	μA	V	mA	V	A	pF	mA	A
P0060SA	6	5	20	800	4	2.2	80	20	50
P0080SA	8	5	25	800	4	2.2	100	20	50
P0300SA	25	5	40	800	4	2.2	100	20	50
P0640SA	58	5	77	800	4	2.2	90	20	50
P0720SA	65	5	88	800	4	2.2	90	20	50
P0900SA	75	5	98	800	4	2.2	90	20	50
P1100SA	90	5	130	800	4	2.2	90	20	50
P1200SA	100	5	130	800	4	2.2	80	20	50
P1300SA	120	5	160	800	4	2.2	80	20	50
P1400SA	130	5	160	800	4	2.2	80	20	50
P1500SA	140	5	180	800	4	2.2	80	20	50
P1800SA	170	5	220	800	4	2.2	80	20	50
P2000SA	180	5	230	800	4	2.2	70	20	50
P2300SA	190	5	260	800	4	2.2	70	20	50
P2400SA	200	5	270	800	4	2.2	70	20	50
P2600SA	220	5	300	800	4	2.2	70	20	50
P2800SA	240	5	320	800	4	2.2	70	20	50
P3100SA	275	5	350	800	4	2.2	70	20	50
P3500SA	320	5	400	800	4	2.2	70	20	50

V_{DRM}: Stand-off voltage, is measured at I_{DRM}.

I_{DRM}: Leakage current at V_{DRM}.

V_{BO}: Breakover voltage, is measured at 100V/μs.

I_{BO}: Breakover current.

V_T: On-state voltage.

I_T: On-state current.

C_O: Off-state capacitance.

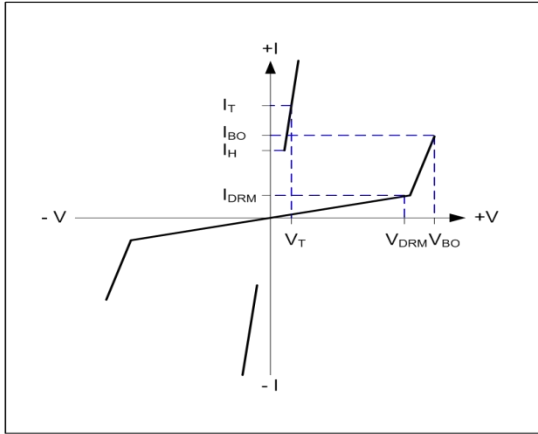
I_H: Holding current.

I_{PP}: Peak pulse current, is a repetitive surge rating and is guaranteed for the life of the product.

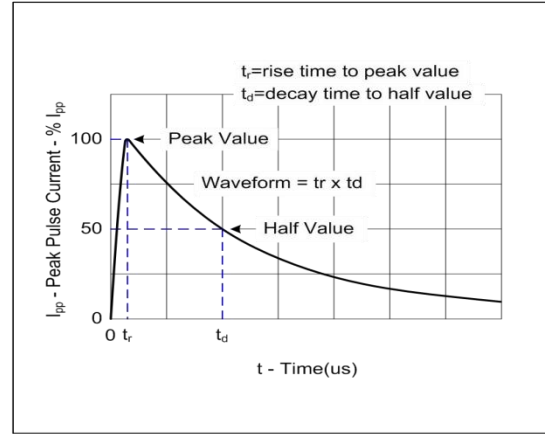
General Notes:

- All measurements are made at an ambient temperature of 25 °C. I_{pp} applies to -40 °C through +85 °C temperature range.
- Special voltage (V_{BO} and V_{DRM}) and holding current (I_H) requirements are available up on request. Off-state capacitance is measured at 1 MHz with a 2 V bias

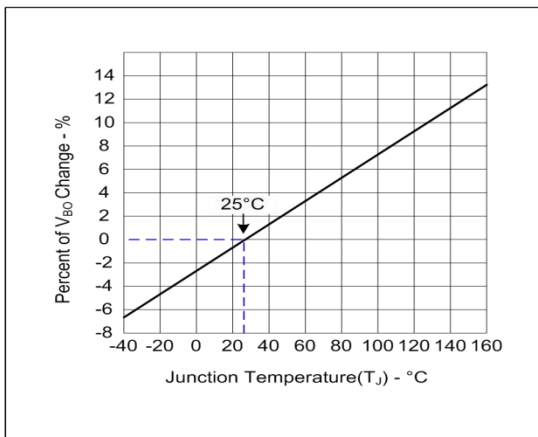
I-V Curve Characteristics:



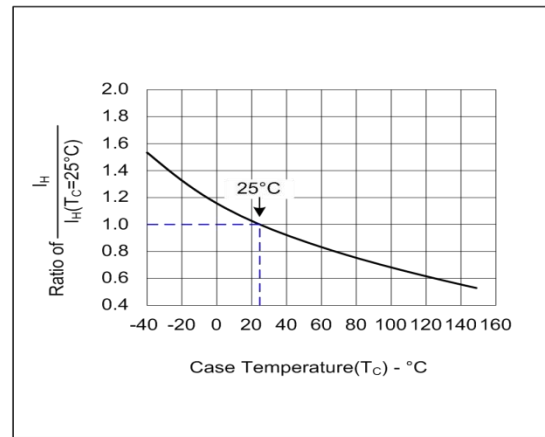
V - I Characteristics



$t_r \times t_d$ Pulse Waveform



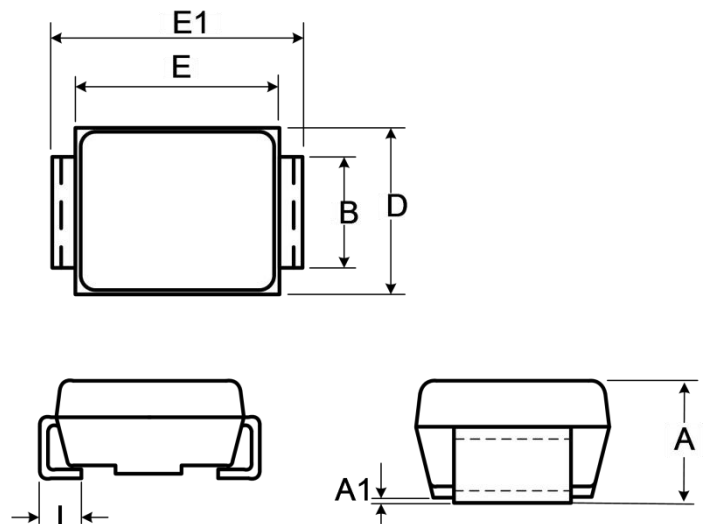
Normalized V_{BO} Change versus Junction Temperature



Normalized DC Holding Current versus Case Temperature

Product Dimensions

Ref.(mm)	Millimeters	
	Min.	Max.
D	3.40	3.94
B	1.90	2.10
E	4.22	4.70
E1	5.21	5.59
A	1.95	2.60
A1	0	0.23
L	0.90	1.42

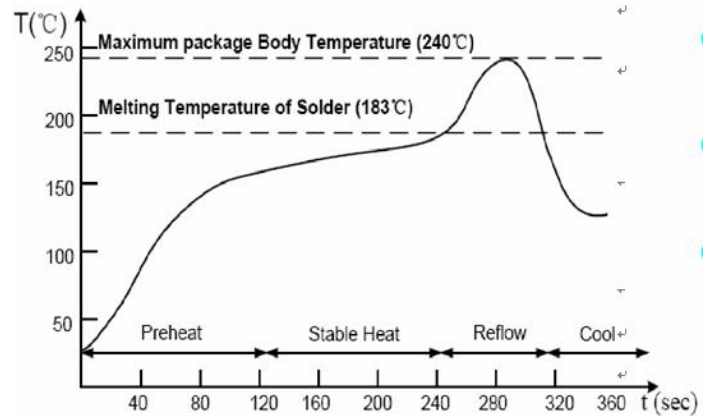


Thermal Resistances

Symbol	Parameter	Value	Unit
T_S	Storage temperature range	-55 to +150	$^{\circ}\text{C}$
T_J	Maximum junction temperature	150	$^{\circ}\text{C}$

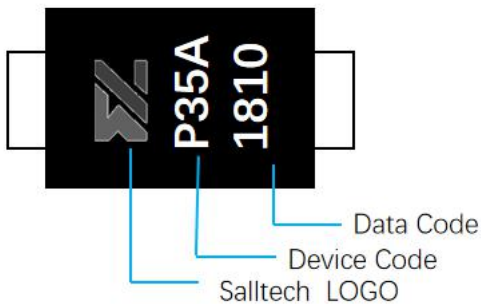
Solder Reflow Recommendations

- Recommended reflow methods: IR, vapor phase oven, hot air oven, wave solder.
- The device can be exposed to a maximum temperature of 265 $^{\circ}\text{C}$ for 10 seconds.
- Devices can be cleaned using standard industry methods and solvents.



Notes: If reflow temperatures exceed the recommended profile, devices may not meet the performance requirements.

Part Marking System



Part Numbering System

P XXXX S A
 (A) (B) (C) (D)

- (A) Salltech Semiconductor Surge Arrester
- (B) Series:0060,0080,0300,.....3500
- (C) Pake: SMB
- (D) Rating Sure Voltage V:50A (10/1000 μs)

Packing Information

Symbol	Spec		
W	12±0.2		
E	1.75±0.1		
F	5.5±0.05		
D0	1.55±0.05		
D1	1.5±0.1		
P0	4.0±0.1		
P1	8.0±0.1		
P2	2.0±0.05		
T	0.23±0.02		
A0	3.81±0.1		
B0	5.74±0.1		
K0	2.4±0.1		
T1	0.05 以上		
D5	Ø330±2.0		13" Reel
D6	Ø13.5±0.5		
H	2.5±1.0		
W2	16±2.0		
Quantity:3000PCS			
D2	Ø178.0±2.0		
D3	Ø50Min.		
D4	Ø13.0±0.5		
W1	16.0±2.0	Quantity:500PCS	

Contact Information

JIANGXI SALLTECH MICRO-ELECTRONICS CO. LTD.

Address: Area 10, No.8, Hangdu Road, Pudong District, Shanghai, P.R.China.

Tel: +86-21-58131219

Fax: +86-21-58131183