

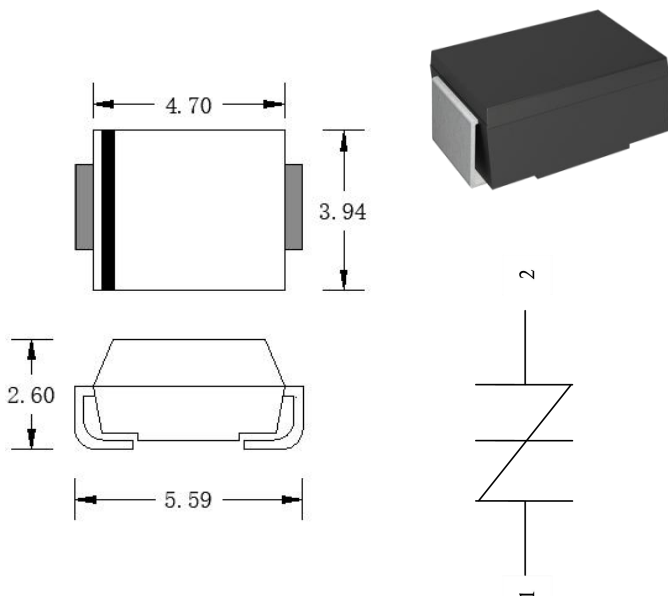
## Description

PXXXXSC series thyristors are a type of semi-conduct component. They are designed in applications, modems, telephones, line cards, answering machines, FAX machines, SLICs, T1/E1, xDSL, PBXs and more.

## Features

- For surface mounted applications to optimize board space
- Low profile package
- Bidirectional crowbar protection
- Low leakage current : I = 5uA max
- Low on-state voltage
- Low Capacitance
- Solid-state silicon technology
- Eliminates overvoltage caused by fast rising transients

## Dimensions & Symbol (Unit: mm Max)



## Mechanical Characteristics

### Package: SMB/DO-214AA

- Case Material: "Green" Molding Compound.
- UL Flammability Classification Rating 94V-0
- Standard Packaging: 12mm tape (EIA STD RS-481)
- Weight: 0.10g
- Terminal Connections: See Diagram Below
- Marking Information: See Below

## Applications

- TIA-968-A/B
- ITU K.20/21 Enhanced Level\*
- ITU K.20/21 Basic Level\*
- GR 1089 Inter-building\*
- GR 1089 Intra-building
- IEC 61000-4-5 2nd edition
- YD/T 1082 YD/T 993 YD/T 950

## Marking Information



Details marking code reference customer approval list

## Ordering Information

Out line	Reel (pcs)	Per carton (pcs)	Reel diameters (mm)
Taping	3K	48K	330

**Absolute Maximum Ratings (TA=25°C, RH=45%-75%, unless otherwise noted)**

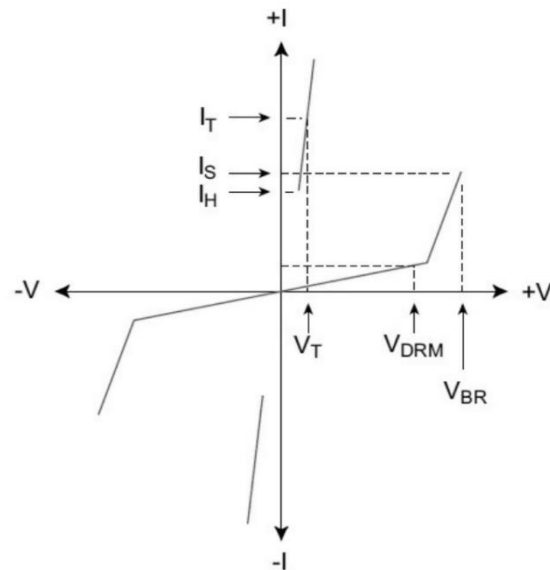
Parameter	Symbol	Value	Unit
Storage temperature range	T <sub>stg</sub>	-60 to +150	°C
Operating junction temperature range	T <sub>j</sub>	-40 to +150	°C

**Part Number Code**

Series code: P SIDACTor → **P** **XXXX** **S** **C** ← Surge: 10/700uS 6KV  
 ↑  
 V<sub>DRM</sub>

**Electrical Parameters & V-I Curve**

Symbol	Parameter
V <sub>DRM</sub>	Peak off-state voltage
I <sub>DRM</sub>	Off-state current
V <sub>S</sub>	Switching voltage
I <sub>S</sub>	Switching current
V <sub>T</sub>	On-state voltage
I <sub>T</sub>	On-state current
I <sub>H</sub>	Holding current
C <sub>O</sub>	Off-state capacitance



**Surge Ratings**

Series	I <sub>PP</sub> (A) min			
	2×10us	8×20us	5×320us	10×1000us
C	250	250	125	100

**Electrical Characteristics (TA=25°C)**

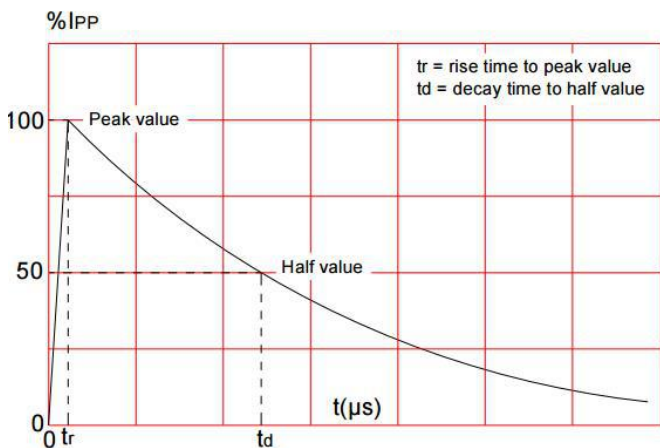
Type	V <sub>DRM</sub>	I <sub>DRM</sub>	V <sub>S</sub>	I <sub>S</sub>	V <sub>T</sub>	I <sub>T</sub>	C <sub>O</sub>	I <sub>H</sub>
	Min.	Max.	Max.	Max.	Max.		Typ.	Typ.
	V	μA	V	mA	V	A	pF	mA
P0080SC	6	5	25	800	4	2.2	100	50
P0300SC	25	5	40	800	4	2.2	100	50
P0640SC	58	5	77	800	4	2.2	100	150
P0720SC	65	5	88	800	4	2.2	100	150
P0900SC	75	5	98	800	4	2.2	90	150
P1100SC	90	5	130	800	4	2.2	90	150
P1300SC	120	5	160	800	4	2.2	90	150
P1500SC	140	5	180	800	4	2.2	85	150
P1800SC	170	5	220	800	4	2.2	85	150
P2000SC	180	5	220	800	4	2.2	85	150
P2300SC	190	5	260	800	4	2.2	80	150
P2600SC	220	5	300	800	4	2.2	80	150
P3100SC	275	5	350	800	4	2.2	65	150
P3500SC	320	5	400	800	4	2.2	65	150
P4000SC	360	5	460	800	4	2.2	45	150
P4500SC	420	5	540	800	4	2.2	45	150
P5000SC	500	5	600	800	4	2.2	45	150

Notes:

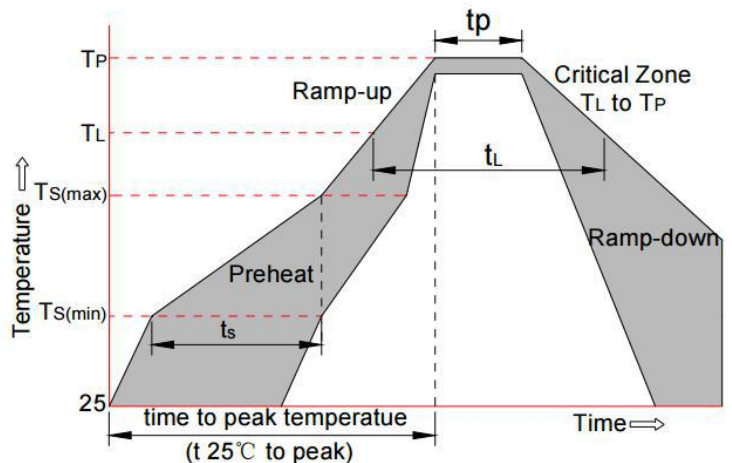
- All measurements are made at an ambient temperature of 25°C. I<sub>PP</sub> applies to -40°C through +85°C temperature range.
- Off-state capacitance (C<sub>O</sub>) is measured at 1 MHz with a 2 V bias and is typical value.

**Ratings And V-I Characteristics Curves (TA=25°C, unless otherwise noted)**

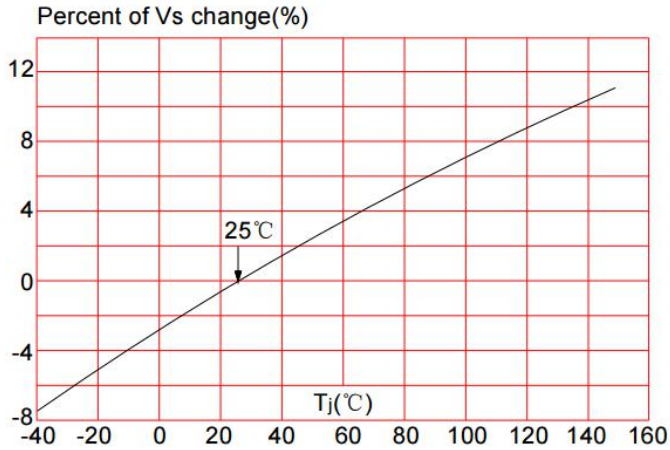
**FIG.1: tr × td pulse waveform**



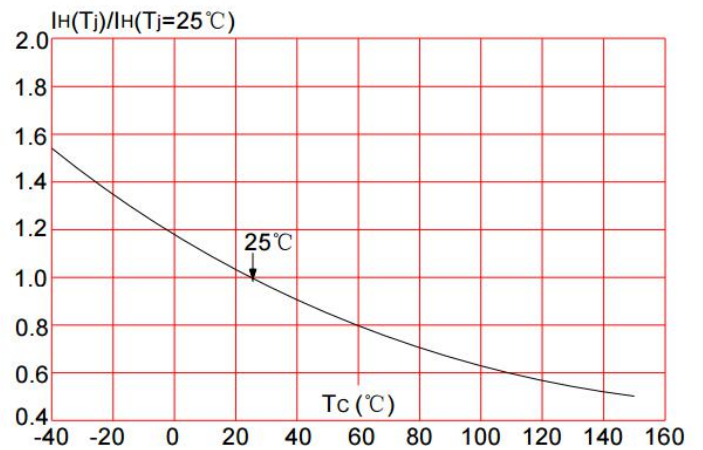
**FIG.2: Reflow condition**



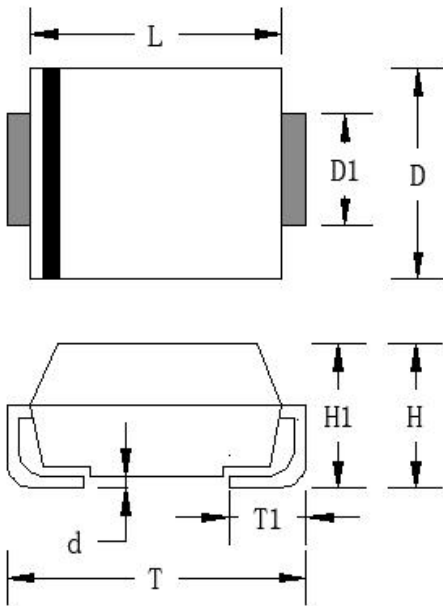
**FIG.3:** Normalized Vs change vs. junction temperature



**FIG.4:** Normalized DC holding current vs. case temperature



### Package Mechanical Data



Ref.(mm)	Millimeters	
	Min.	Max.
D	3.40	3.94
D1	1.90	2.10
L	4.22	4.70
T	5.21	5.59
T1	0.90	1.42
d	0	0.23
H	1.95	2.60
H1	2.0	2.34

### Contact Information

ShenZhen Salltech Microelectronics Co.,Ltd.

610 Room, No.1 Bulding,Duocai Science Park,Guanlan High Tech Park,Longhua District, Shenzhen.

TEL: +86-0755-21053994

FAX: +86-0755-21053994