

## Description

Fast Delivery Time

P2000SALRP SIDACtor Protection Thyristor protect telecommunications equipment such as ADSL Modems,Router, , Telephone, CCTV Camera,Digital Video Record,Video Capture Card,Twisted-pair video transmitter,CATV Splitter.....Etc.

P2000SALRP SIDACtor Protection Thyristor are used to enable equipment to meet various regulatory requirements including GR 1089, ITU K.20/21,IEC 61000-4-5, YD/T 1082,YD/T 993,YD/T 950,TIA-968-A ,TIA-968-B



## Features

Compared to surge suppression using other technologies, P2000SALRP devices offer absolute surge protection regardless of the surge current available and the rate of applied voltage (dv/dt). P2000SALRP devices:

- 100% Lead-Free(RoHs Compliant )
- Cannot be damaged by voltage
- Eliminate hysteresis and heat dissipation typically found with clamping devices
- Eliminate voltage overshoot caused by fast-rising transients
- Are non-degenerative
- Have low capacitance, making them ideal for high-speed transmission equipment

## Electrical Characteristics

Parameter	Definition
$V_{DRM}$	<b>Peak Off-state Voltage</b> — maximum voltage that can be applied while maintaining off state
$V_S$	<b>Switching Voltage</b> — maximum voltage prior to switching to on state
$I_H$	<b>Holding Current</b> — minimum current required to maintain on state
$I_S$	<b>Switching Current</b> — maximum current required to switch to on state
$I_T$	<b>On-state Current</b> — maximum rated continuous on-state current
$V_T$	<b>On-state Voltage</b> — maximum voltage measured at rated on-state current
Capacitance	<b>Off-state Capacitance</b> — typical capacitance measured in off state
$I_{DRM}$	<b>Leakage Current</b> — maximum peak off-state current measured at $V_{DRM}$
$I_{PP}$	<b>Peak Pulse Current</b> — maximum rated peak impulse current
$I_{TSM}$	<b>Peak One-cycle Surge Current</b> — maximum rated one-cycle AC current
di/dt	<b>Rate of Rise of Current</b> — maximum rated value of the acceptable rate of rise in current over time

### Electrical Characteristics




Part Number	Marking	$V_{DRM}$ @ $I_{DRM}=5\mu A$	$V_s$ @100V/ $\mu s$	$I_H$	$I_s$	$I_T$	$V_T$ @ $I_T=2.2Amps$	Capacitance @1MHz,2V bias
		$V_{min}$	$V_{max}$	mA min	mA max	A max	$V_{max}$	pF
<b>P2000SALRP</b>	P20A	180	220	150	800	2.2	4	40

Notes:

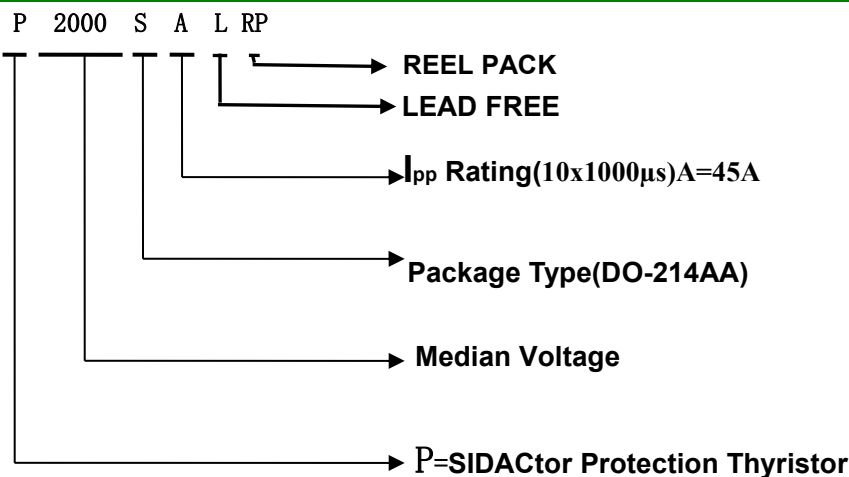
-All measurements are made at an ambient temperature of 25°C .Ipp applies to -40°C through +85°C temperature range .

-Off-state capacitance(Co) is typical value.

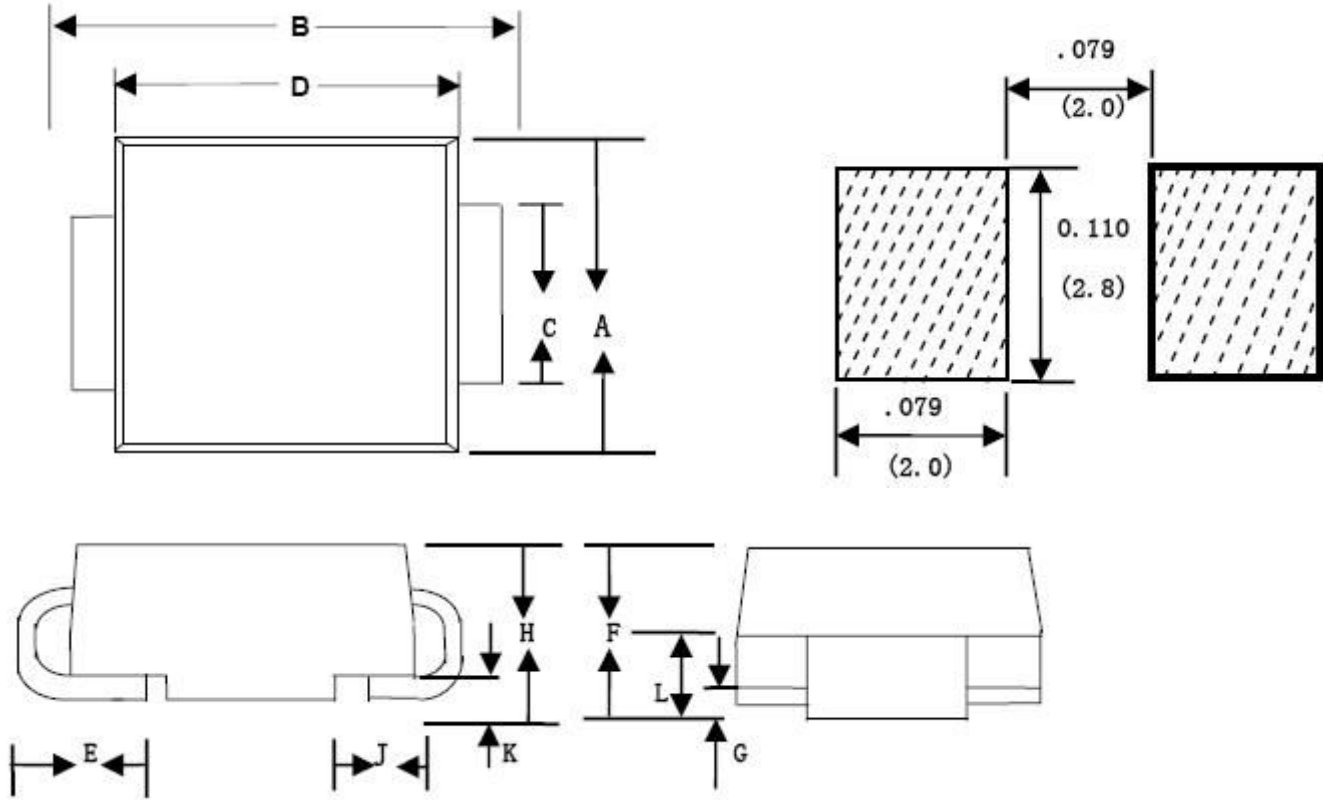
Series	$I_{pp}$ 2x10 $\mu s$	$I_{pp}$ 8x20 $\mu s$	$I_{pp}$ 10x160 $\mu s$	$I_{pp}$ 10x560 $\mu s$	$I_{pp}$ 10x1000 $\mu s$	$I_{pp}$ 5x320 $\mu s$	$I_{pp}$ 5x310 $\mu s$	$I_{pp}$ 10x360 $\mu s$	$I_{TSM}$ 50/60Hz	di/dt
	Amps	Amps	Amps	Amps	Amps	Amps	Amps	Amps	Amps	Amps/ $\mu s$
A	150	150	90	50	45	75	75	75	20	500

Package	DO-214AA/SMB	Symbol	Parameter	Value	Unit
		$T_J$	Operating Junction Temperature Range	-40 to +150	°C
		$T_s$	Storage Temperature Range	-65 to +150	°C
		$R_{\theta JA}$	Junction to Ambient on prited circuit	90	°C /W

### Description of Part Number



Dimensions - DO-214AA



Dimension	Inches		Millimeters	
	Min	Max	Min	Max
A	0.134	0.155	3.40	3.94
B	0.205	0.22	5.21	5.59
C	0.075	0.083	1.90	2.11
D	0.166	0.185	4.22	4.70
E	0.036	0.056	0.91	1.42
F	0.073	0.087	1.85	2.2
G	0.002	0.008	0.05	0.20
H	0.077	0.094	1.95	2.40
J	0.043	0.053	1.09	1.35
K	0.008	0.014	0.20	0.35
L	0.039	0.049	0.99	1.24

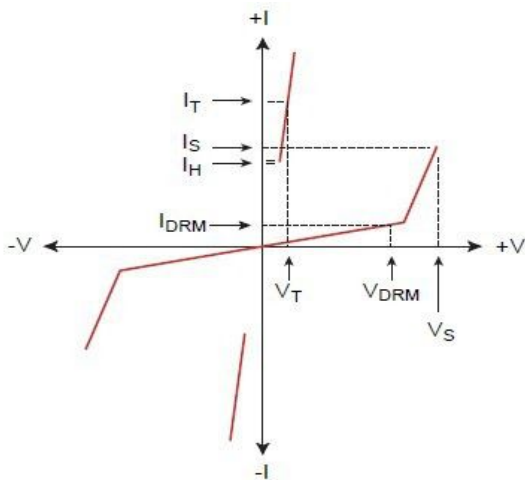
## Packing Options



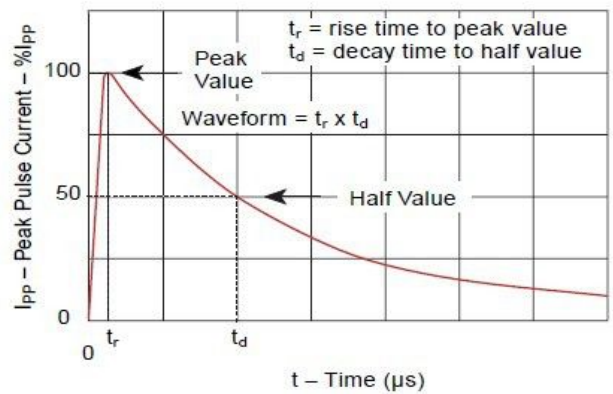
Package Type	Description	Packing Quantity	Industry Standard
S	DO-214AA Reel Pack	2500 PCS	EIA-481-D

## Characteristics Curve

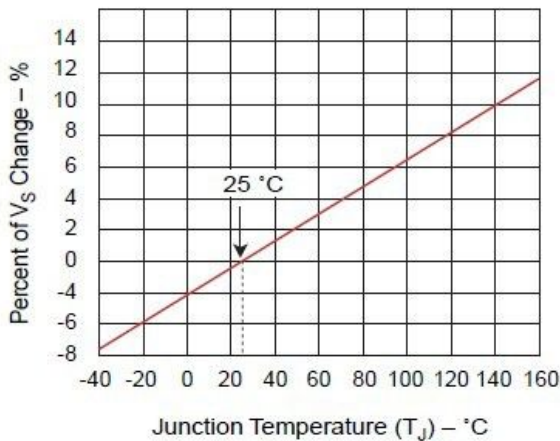
### V-I Characteristics



### Tr x Td Pulse Waveform



### Normalized Vs Change Versus Junction Temperature



### Normalized DC Holding Current Versus Case Temperature

