

## Description

Fast Delivery Time

Pxx00LA Series 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.

Pxx00LA Series 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, Pxx00LA Series devices offer absolute surge protection regardless of the surge current available and the rate of applied voltage (dv/dt). Pxx00LA Series 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	$V_{DRM}$	$V_s$	$I_H$	$I_s$	$I_T$	$V_T$	Capacitance
		@ $I_{DRM}=5 \mu A$	@ $100V/\mu s$				@ $I_T=2.2Amps$	@ $1MHz, 2V$ bias
		$V_{min}$	$V_{max}$	$mA_{min}$	$mA_{max}$	$A_{max}$	$V_{max}$	pF
<b>P2300LA</b>	P23LA	190	260	150	800	2.2	4	45
<b>P2600LA</b>	P26LA	220	300	150	800	2.2	4	35
<b>P3100LA</b>	P31LA	275	350	150	800	2.2	4	35
<b>P3500LA</b>	P35LA	320	400	150	800	2.2	4	30

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.


\*For surge ratings,see next page.

Surge Ratings

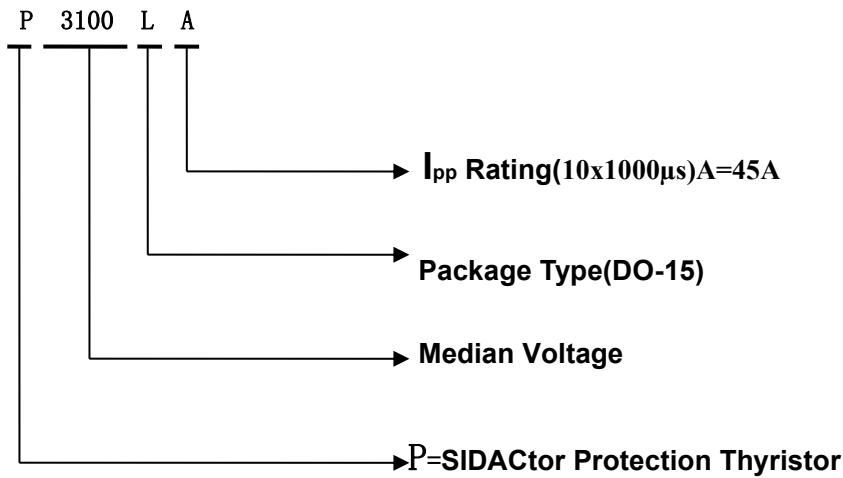


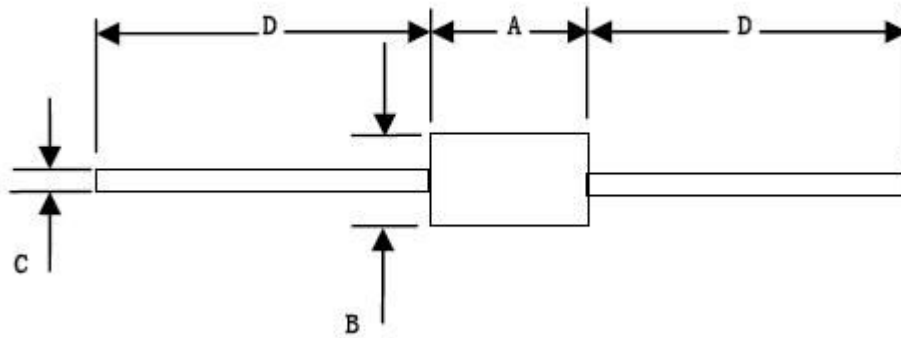
	$I_{pp}$ 2x10 $\mu$ s	$I_{pp}$ 8x20 $\mu$ s	$I_{pp}$ 10x160 $\mu$ s	$I_{pp}$ 10x560 $\mu$ s	$I_{pp}$ 10x1000 $\mu$ s	$I_{pp}$ 5x320 $\mu$ s	$I_{pp}$ 5x310 $\mu$ s	$I_{pp}$ 10x360 $\mu$ s	$I_{TSM}$ 50/60Hz	di/dt
Series	Amps	Amps	Amps	Amps	Amps	Amps	Amps	Amps	Amps	Amps/ $\mu$ s
A	150	150	90	50	45	75	75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

Thermal Considerations

Package	DO-15	Symbol	Parameter	Value	Unit
		$T_J$	Operating Junction Temperature Range	-40 to +150	$^{\circ}$ C
		$T_S$	Storage Temperature Range	-65 to +150	$^{\circ}$ C
		$R_{\theta JA}$	Junction to Ambient on prited circuit	90	$^{\circ}$ C /W

Description of Part Number





Dimension	Inches		Millimeters		Note
	Min	Max	Min	Max	
A	0.230	0.300	5.80	7.60	
B	0.104	0.140	2.60	3.60	Φ
C	0.026	0.034	0.70	0.90	Φ
D	1.000		25.4		

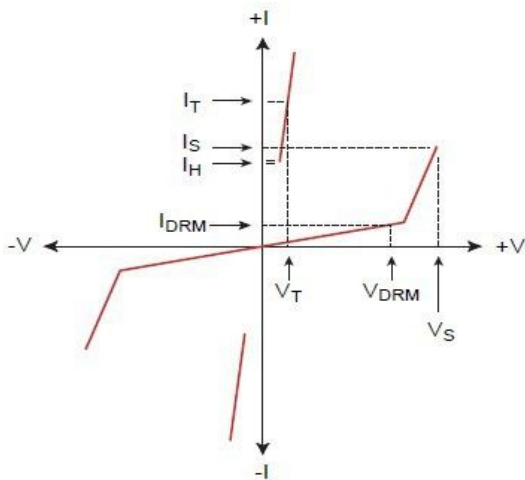
## Packing Options



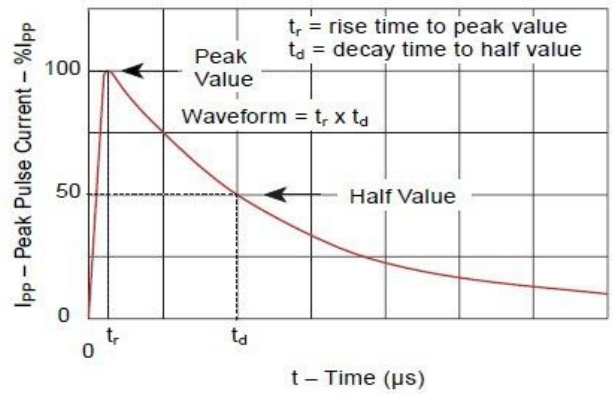
Package Type	Description	Packing Quantity	Industry Standard
L	DO-15 Tape and Reel Pack	4000 PCS	N/A

## Characteristics Curve

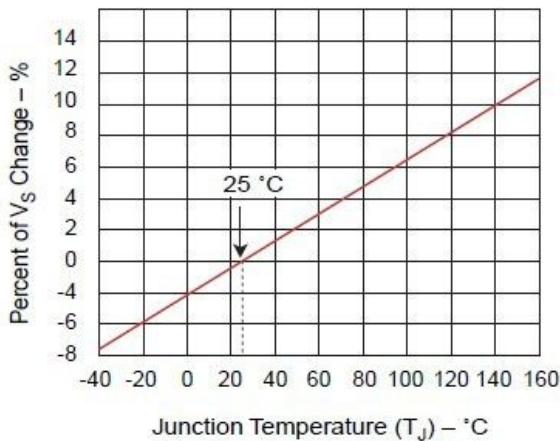
### V-I Characteristics



### Tr x Td Pulse Waveform



### Normalized $V_S$ Change Versus Junction Temperature



### Normalized DC Holding Current Versus Case Temperature

