ShenZhen HuaXinAn Electronics Co.,Ltd PXX00LA

SIDACtor Protection Thyristors Package DO-15

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

Electrical Characteristics

Part Number	Marking	V_{DRM} @I_{DRM}=5μA	V_S @100V/μs	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	Vmax	pF
P2300LA	P23LA	190	260	150	800	2.2	4	45
P2600LA	P26LA	220	300	150	800	2.2	4	35
P3100LA	P31LA	275	350	150	800	2.2	4	35
P3500LA	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.

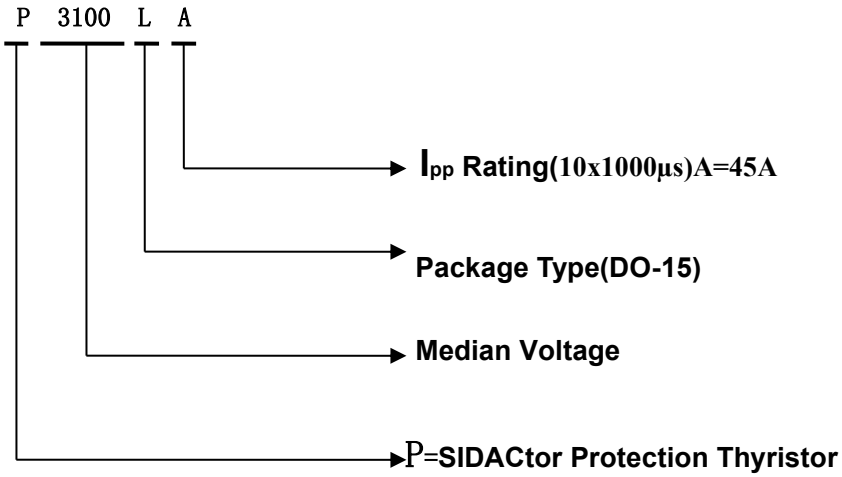
Surge Ratings

Series	I_{pp} 2x10μs	I_{pp} 8x20μs	I_{pp} 10x160μs	I_{pp} 10x560μs	I_{pp} 10x1000μs	I_{pp} 5x320μs	I_{pp} 5x310μs	I_{pp} 10x360μs	I_{TSM} 50/60Hz	di/dt
	Amps	Amps	Amps	Amps	Amps	Amps	Amps	Amps	Amps	Amps/μs
A	150	150	90	50	45	75	75	75	20	500

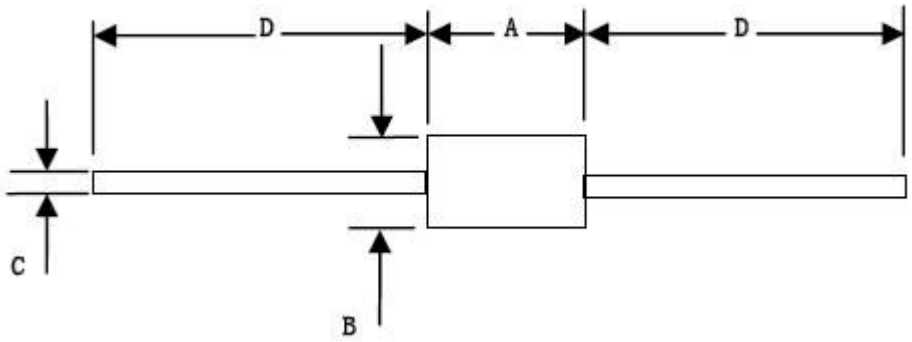
Thermal Considerations

Package DO-15	Symbol	Parameter	Value	Unit
	T_J	Operating Junction Temperature Range	-40 to +150	°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-15



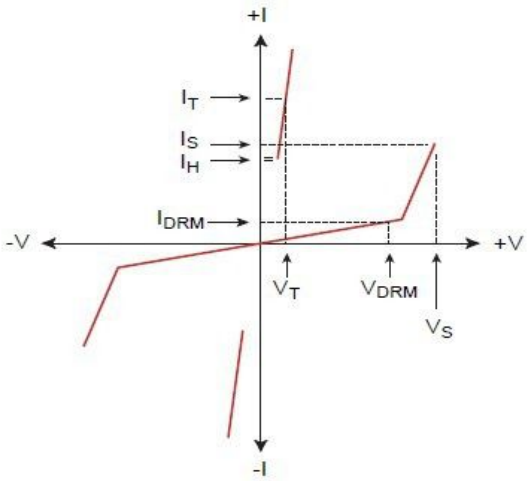
Dimension	Inches		Millimeters		Note
	Min	Max	Min	Max	
A	0.230	0.300	5.80	7.60	
B	0.104	0.140	2.60	3.60	Φ
C	0.026	0.034	0.70	0.90	Φ
D	1.000		25.4		

Packing Options

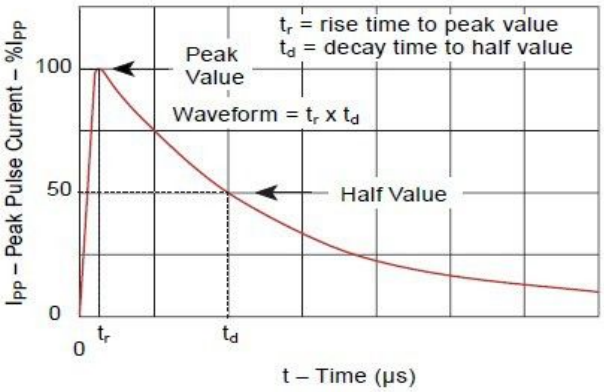
Package Type	Description	Packing Quantity	Industry Standard
L	DO-15 Tape and Reel Pack	4000 PCS	N/A

Characteristics Curve

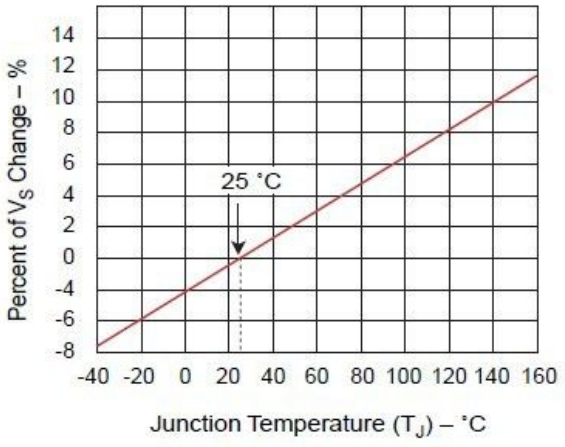
V-I Characteristics



Tr x Td Pulse Waveform



Normalized Vs Change Versus Junction Temperature



Normalized DC Holding Current Versus Case Temperature