

### Description

Fast Delivery Time

Pxx00GALRP,PXX00GBLRP 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.

Pxx00GALRP,PXX00GBLRP 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, Pxx00GALRP,PXX00GBLRP Series devices offer absolute surge protection regardless of the surge current available and the rate of applied voltage (dv/dt).

Pxx00GALRP,PXX00GBLRP 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 <sub>DRM</sub>	V <sub>s</sub>	I <sub>H</sub>	I <sub>s</sub>	I <sub>T</sub>	V <sub>T</sub>	Capacitance
		@I <sub>DRM</sub> =5 μ A	@100V/μs	mA <sub>min</sub>	mA <sub>max</sub>	A <sub>max</sub>	@I <sub>T</sub> =2.2Amps	@1MHz,2V bias
		V <sub>min</sub>	V <sub>max</sub>	mA <sub>min</sub>	mA <sub>max</sub>	A <sub>max</sub>	V <sub>max</sub>	pF
P1100GALRP	P11LA	90	130	150	800	2.2	5	30
P1300GALRP	P13LA	120	160	150	800	2.2	5	30
P1500GALRP	P15LA	140	180	150	800	2.2	5	30
P1800GALRP	P18LA	170	220	150	800	2.2	5	30
P2300GALRP	P23LA	190	260	150	800	2.2	5	30
P2600GALRP	P26LA	220	300	150	800	2.2	5	30
P3100GALRP	P31LA	275	350	150	800	2.2	5	30
P3500GALRP	P35LA	320	400	150	800	2.2	5	30
P1100GBLRP	P11LB	90	130	150	800	2.2	5	30
P1300GBLRP	P13LB	120	160	150	800	2.2	5	30
P1500GBLRP	P15LB	140	180	150	800	2.2	5	30
P1800GBLRP	P18LB	170	220	150	800	2.2	5	30
P2300GBLRP	P23LB	190	260	150	800	2.2	5	30
P2600GBLRP	P26LB	220	300	150	800	2.2	5	30
P3100GBLRP	P31LB	275	350	150	800	2.2	5	30
P3500GBLRP	P35LB	320	400	150	800	2.2	5	30

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 typical value.


\*For surge ratings,see next page.

Surge Ratings

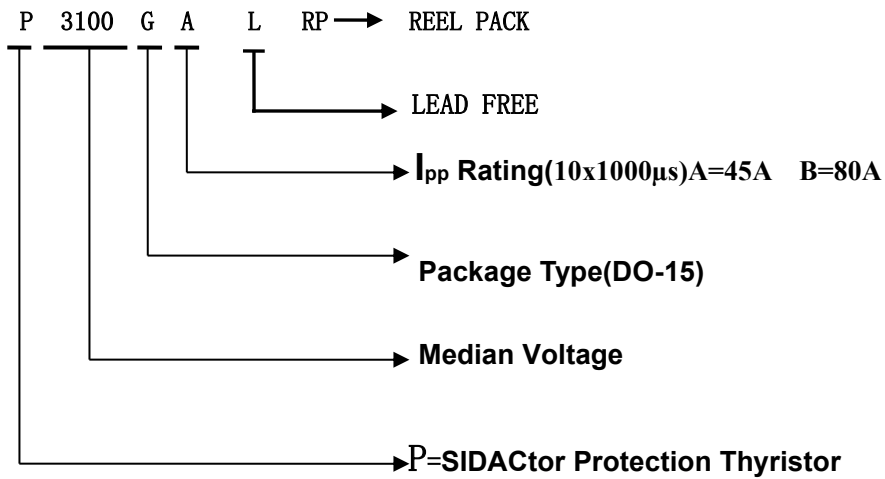


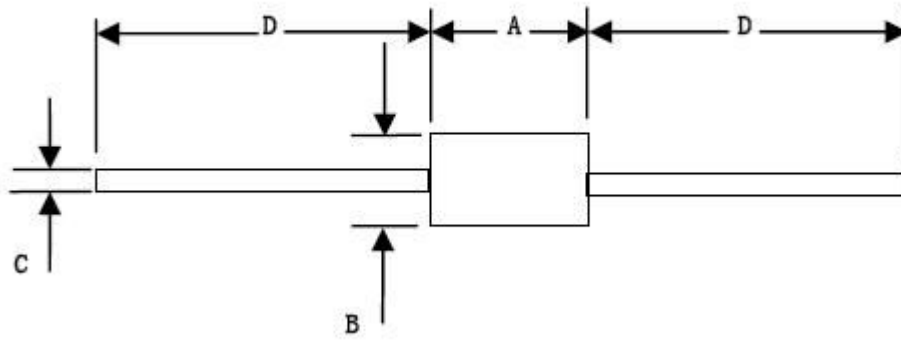
Series	$I_{pp}$ 2x10 $\mu$ s	$I_{pp}$ 8x20 $\mu$ s	$I_{pp}$ 10x160 $\mu$ s	$I_{pp}$ 10x560 $\mu$ s	$I_{pp}$ 10x1000 $\mu$ s	$I_{pp}$ 5x320 $\mu$ s	$I_{pp}$ 5x310 $\mu$ s	$I_{pp}$ 10x360 $\mu$ s	$I_{TSM}$ 50/60Hz	di/dt
	Amps	Amps	Amps	Amps	Amps	Amps	Amps	Amps	Amps	Amps/ $\mu$ s
A	150	150	90	50	45	75	75	75	20	500
B	250	250	150	100	80	100	100	125	25	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		

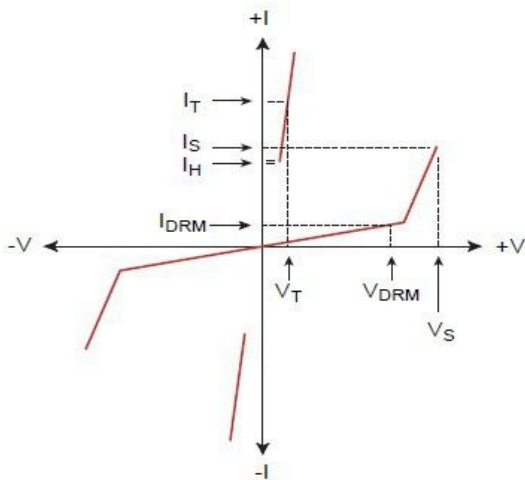
Packing Options



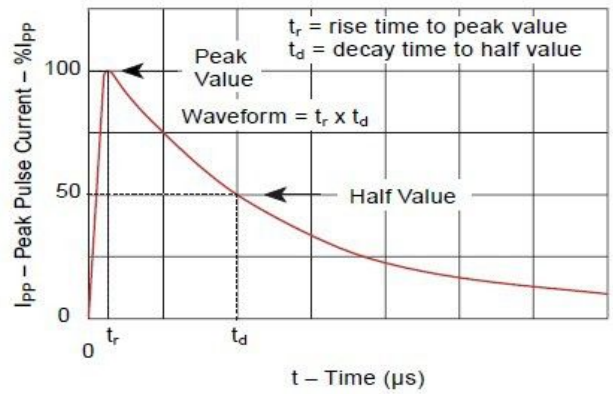
Package Type	Description	Packing Quantity	Industry Standard
G	DO-15 Tape and Reel Pack	4000 PCS	N/A

Characteristics Curve

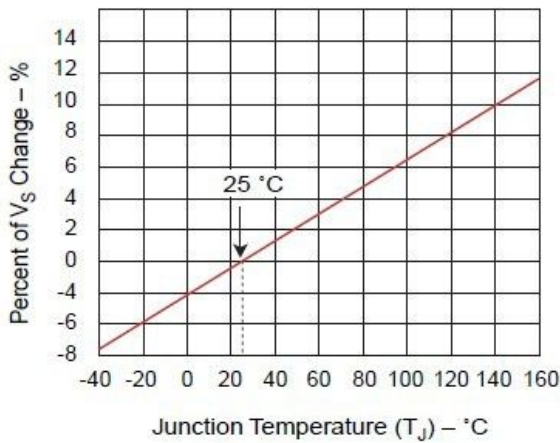
V-I Characteristics



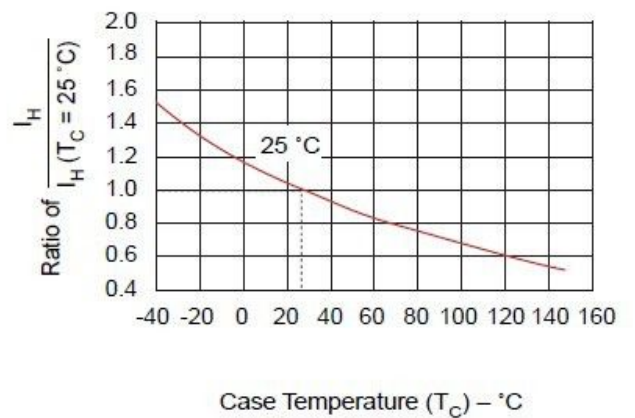
Tr x Td Pulse Waveform



Normalized Vs Change Versus Junction Temperature



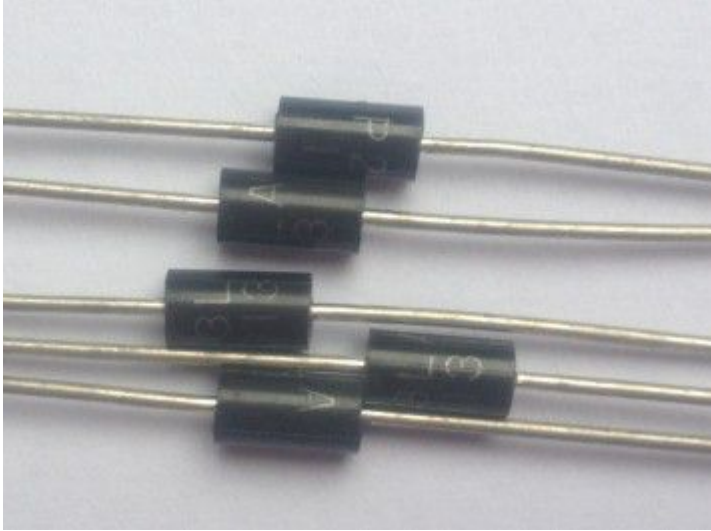
Normalized DC Holding Current Versus Case Temperature



Sample pictures

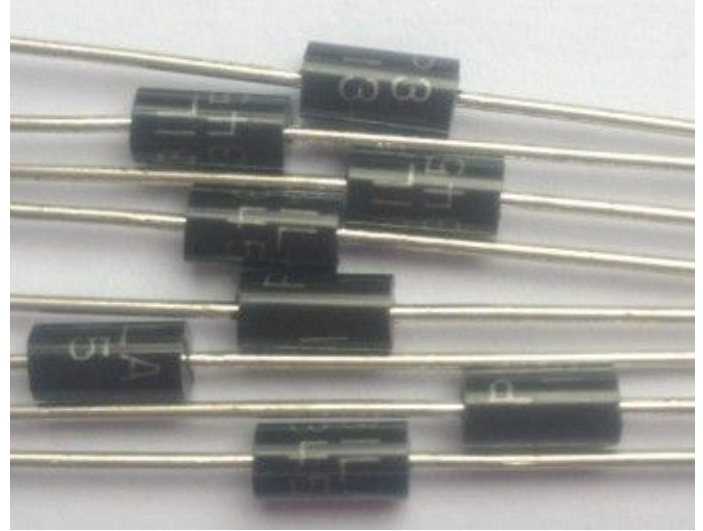
P2300GALRP(Marking: P23LA)

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P3100GALRP(Marking: P31LA)

**Fast Delivery Time**



P3500GALRP (Marking: P35LA)

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