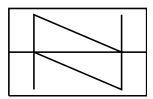
## Description

The PXXXXSAseries are thyristor surge suppressor (TSS) designed to protect telecommunication equipment against lightning and transients induced by AC power lines. These devices can be used on central office equipment, PBX, DSU, OCU and other telecommunication equipment. The bidirectional configuration provides protection for both positive and negative transients and the discrete surface mount package allows for individual placement of the device on line cards or other locations where multiple component devices do not offer the versatile in board trace layout.

This series can be used to provide protection in accordance with industry standards such as FCC Part 68, AN-SI C62.41, UL 1459, GR-1089-CORE, IEC 61000-2, IEC 61000-4 and IEC 61000-4-5 requirements.

### **Device Schematic**

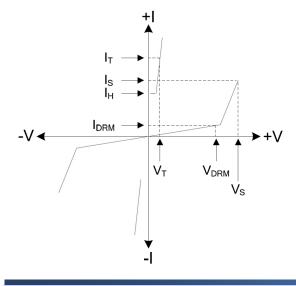


Device Schematic



SMA

# **Device Schematic**





### Features

- \* Peak Off-State Voltage: 6V~320V
- \* RoHS Compliant
- \* Package: DO-214AC
- \* 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
- \* Will not fatigue
- \* Have low capacitance, making them ideal for high-speed

### Application

- \* T1/E1 Trunk & Line Card
- \* RS-485/RS-232/RS-422
- Video/audio line

## **Ordering Information**

Part Number	Packaging	Reel Size
PXXXXSA	2000/Tape & Reel	7 inch
PXXXXSA	5000/Tape & Reel	13 inch

## Surge Ratings (TA=25°C unless otherwise specified)

Series	Ipp @2/10µs (A)	lpp @8/20µs (A)	lpp @10/160µs (A)	lpp @10/560µs (A)	lpp @10/1000µs (A)	
PxxxxSA	200	150	90	50	45	

## Electrical Characteristics (T<sub>A</sub>=25°C unless otherwise specified)

Part Number	VDRM (V)	VS (V)	IH (mA)	IS (mA)	IDRM (µA)	VT (V)	IT (A)	Cj @2V, 1MHz (pF)
P0080SA	6	25	50	800	5	4	2.2	60
P0300SA	25	40	50	800	5	4	2.2	60
P0640SA	58	77	150	800	5	4	2.2	60
P0720SA	65	88	150	800	5	4	2.2	60
P0900SA	75	98	150	800	5	4	2.2	60
P1100SA	90	130	150	800	5	4	2.2	60
P1300SA	120	160	150	800	5	4	2.2	40
P1500SA	140	180	150	800	5	4	2.2	40
P1800SA	160	220	150	800	5	4	2.2	40
P2300SA	190	260	150	800	5	4	2.2	30
P2600SA	220	300	150	800	5	4	2.2	30
P3100SA	275	350	150	800	5	4	2.2	30
P3500SA	320	400	150	800	5	4	2.2	30

### Notes:

Is:Switching Current - maximum current required to switch to on state

IDRM:Leakage Current - maximum peak off-state current measured at VDRM

IH:Holding Current – minimum current required to maintain on state

IPP:Peak Pulse Current - maximum rated peak impulse current

IT:On-state Current - maximum rated continuous on-state current

VDRM:Peak Off-state Voltage - maximum voltage that can be applied while maintaining off state

VT:On-state Voltage - maximum voltage measured at rated on-state current

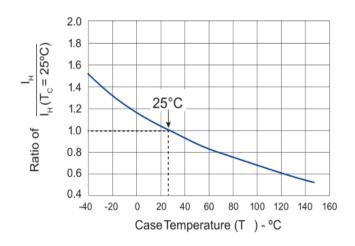
## PXXXXSA



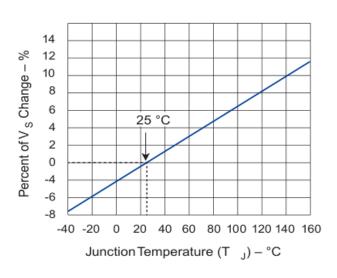
### **Thermal Considerations**

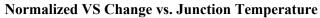
Package(DO-214AC)	Symbol	Parameter	Value	Unit
	TJ Operating Junction Temperature		-55 to +125	°C
	Tstg	Storage Temperature Range	-55 to +150	°C
	RøJA	Junction to Ambient on printed circuit	90	°C/W

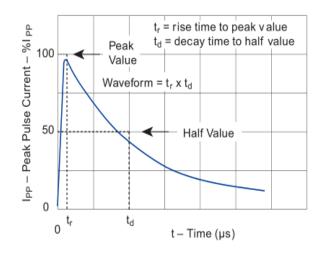
## Typical Performance Characteristics (T<sub>A</sub>=25°C unless otherwise Specified)



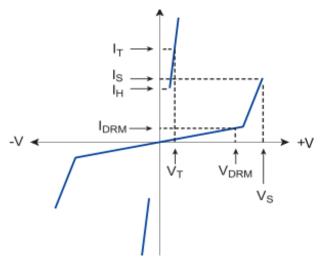
#### Normalized DC Holding Current vs. Case Temperature

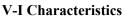






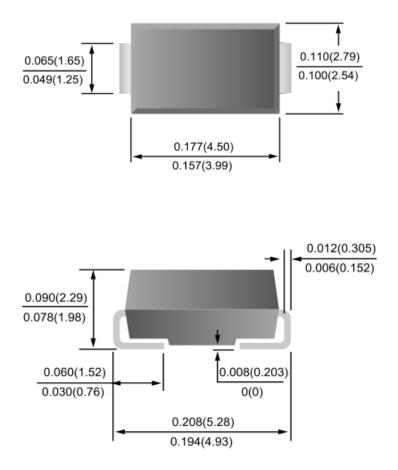








### DO-214AC (SMA) Package Outline Drawing (Dimensions in millimeters)



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