

## Thyristor Surge Suppressors - DO-214AA

### Description

P4200Sx series are a type of semiconductor component. They are designed to protect baseband equipment from damaging overvoltage transients.

### Features

- Low profile package.
- Low on-state voltage.
- Excellent capability of absorbing transient surge.
- Quick response to surge voltage (ns Level).
- Eliminates overvoltage caused by fast rising transients.
- Moisture sensitivity level: Level 1.
- Non degenerative



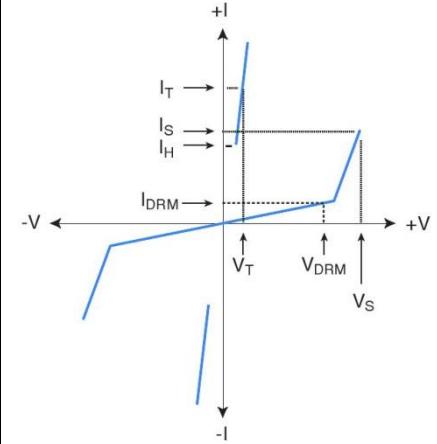
DO-214AA(SMB)

### Device Symbol



### Typical Applications

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
$V_T$	On-state Voltage – maximum voltage measured at rated on-state current
$I_{DRM}$	Leakage Current – maximum peak off-state current measured at $V_{DRM}$
$I_S$	Switching Current – maximum current required to switch to on state
$I_T$	On-state Current – maximum rated continuous on-state current
$I_H$	Holding Current – minimum current required to maintain on state
$C_O$	Off-state Capacitance – typical capacitance measured in off state
$I_{PP}$	Peak Pulse Current – maximum rated peak impulse current



### Thermal Consideration

Parameter	Symbol	Value	Unit
Operating Temperature	$T_J$	-60 to +150	°C
Storage Temperature	$T_{STG}$	-60 to +125	°C
Repetitive peak pulse current	$IPP$	see next table	A

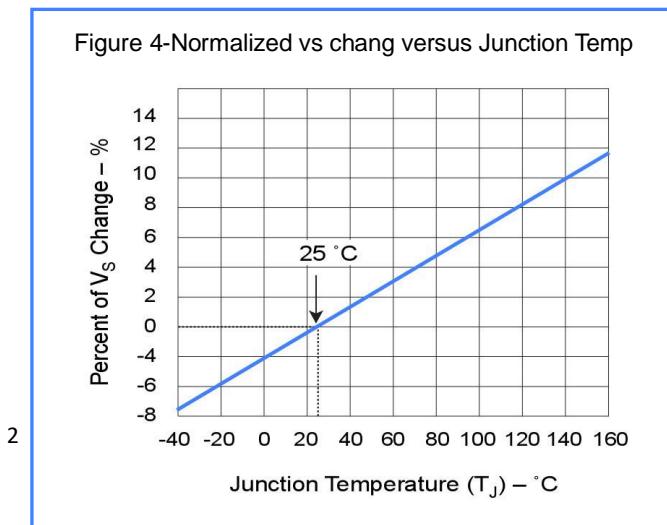
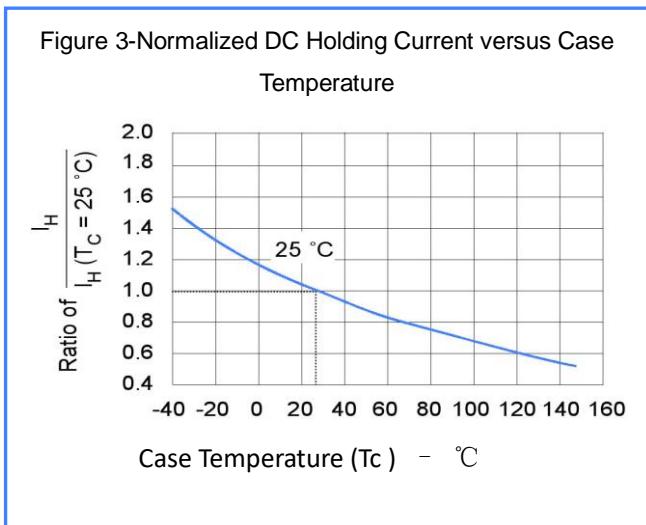
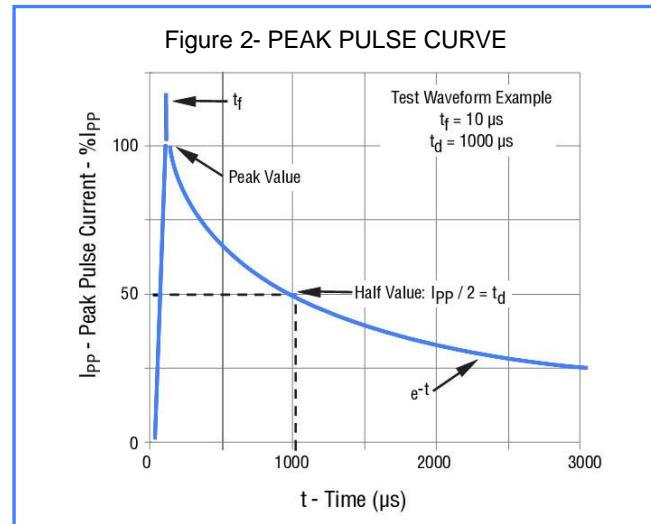
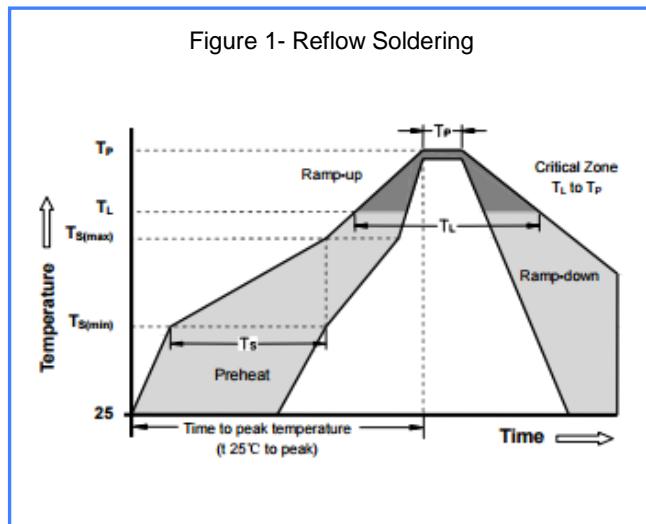
Summary Electrical Characteristics,  $T_a = 25^\circ C$  (Unless Otherwise Noted)

Part Number	IDRM@VDRM		$V_s @ I_s$		VT@ IT		IH	CO <sup>®</sup>
	$\mu A$	V	V	mA	V	A	mA	pF
	max		max	max	max	max	max	Max
P4200SB	1	400	520	800	4	2.2	100	35
P4200SC	1	400	520	800	4	2.2	100	35
P4200SD	1	400	520	800	4	2.2	100	40

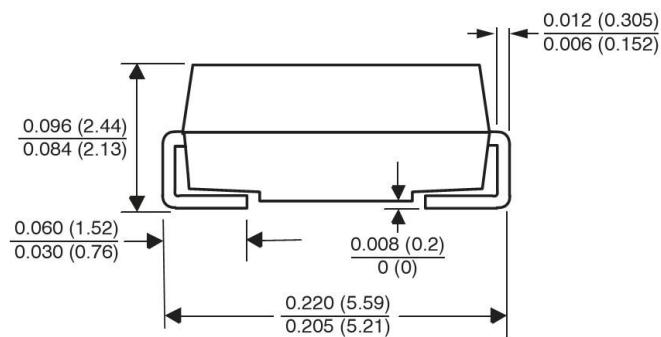
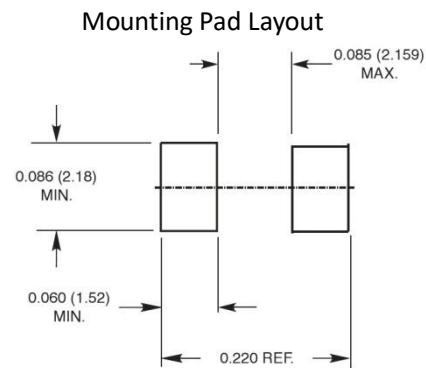
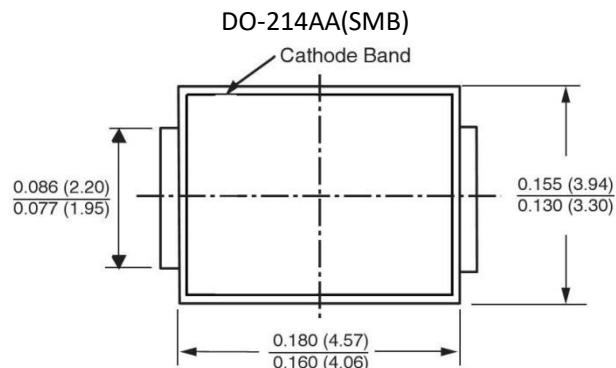
## Surge Ratings

Series	I <sub>pp</sub> 2/10 $\mu$ S Amps	I <sub>pp</sub> 8/20 $\mu$ S Amps	I <sub>pp</sub> 5/320 $\mu$ S Amps	I <sub>pp</sub> 10/1000 $\mu$ S Amps
B	250	250	100	80
C	500	400	150	100
D	800	600	200	200

## Rating &amp; Characteristic Curves



## PACKAGE OUTLINE DIMENSIONS in inches (millimeters)



## Disclaimer

Specifications are subject to change without notice.

The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time.

Users should verify actual device performance in their specific applications.