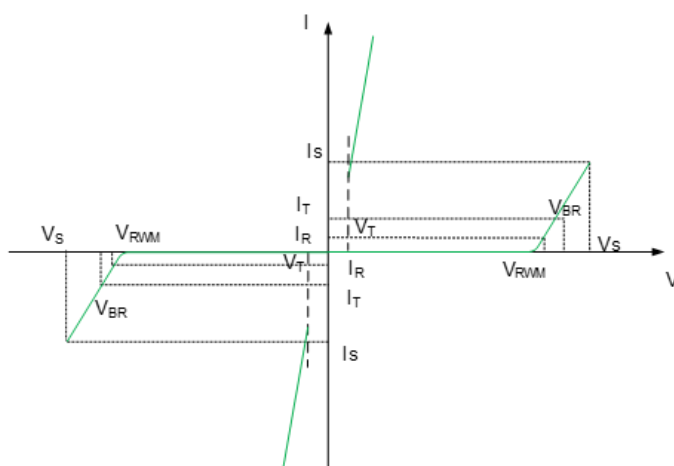


**TSS** components are solid state crowbar devices designed to protect telecom equipment during transient conditions , as follows:

- ◆ 1.Excellent transient voltage suppression
- ◆ 2. Wide range of voltage ratings
- ◆ 3. Symmetrical V-1 characteristics (Non Polarity)
- ◆ 4. Fast response
- ◆ 5. Steady operation for repeating surge
- ◆ 6.Low temperature coefficient
- ◆ 7.High reliability

## CHARACTERISTICS



Parameter	Definition
$C_o$	<b>Off-state Capacitance</b> — typical capacitance measured in off state
$di/dt$	<b>Rate of Rise of Current</b> — maximum rated value of the acceptable rate of rise in current over time
$I_s$	<b>Switching Current</b> — maximum current required to switch to on state
$I_{DRM}$	<b>Leakage Current</b> — maximum peak off-state current measured at $V_{DRM}$
$I_H$	<b>Holding Current</b> — minimum current required to maintain on state
$I_{PP}$	<b>Peak Pulse Current</b> — maximum rated peak impulse current
$I_T$	<b>On-state Current</b> — maximum rated continuous on-state current
$V_S$	<b>Switching Voltage</b> — maximum voltage prior to switching to on state
$V_{DRM}$	<b>Peak Off-state Voltage</b> — maximum voltage that can be applied while maintaining off state
$V_T$	<b>On-state Voltage</b> — maximum voltage measured at rated on-state current

## Electrical Characteristics

Part Number	$V_{DRM}$	$V_S$	$V_T@I_T$	$I_{DRM}@V_{DRM}$	$I_S$	$I_T$	$I_H$	$C_O$
	Volts	Volts	Volts	$\mu$ Amps	$\mu$ Amps	Amps	mAmps	pF
P0080TA	6	25	4	5	800	2.2	50	60
P0300TA	25	40	4	5	800	2.2	50	65
P0640TA	58	77	4	5	800	2.2	150	45
P0720TA	65	88	4	5	800	2.2	150	45
P1100TA	90	130	4	5	800	2.2	150	45
P2300TA	190	260	4	5	800	2.2	150	45
P2600TA	220	300	4	5	800	2.2	150	45
P3100TA	275	350	4	5	800	2.2	150	40
P3500TA	320	400	4	5	800	2.2	150	40

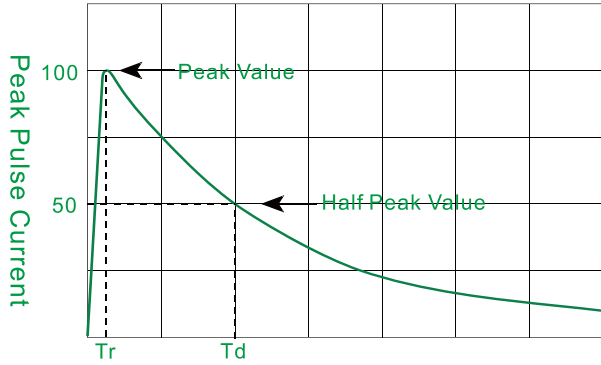
### Notes:

- ◆ All measurements are made at an ambient temperature of 25°C. IPP applies to -40°C through +85°C temperature range.
- ◆ Off-state capacitance ( $C_O$ ) is measured at 1 MHz with a 2 V bias and is typical value.

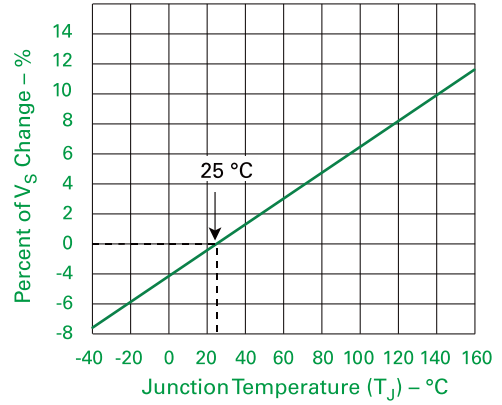
## Surge Ratings

Series	2/10 $\mu$ s	8/20 $\mu$ s	10/160 $\mu$ s	10/560 $\mu$ s	10/1000 $\mu$ s	60HZ	di/dt
A	150Amps	150Amps	90Amps	50Amps	45Amps	10Amps	500 Amps/ $\mu$ s
B	250Amps	250Amps	150Amps	100Amps	80Amps	30Amps	
C	400Amps	400Amps	200Amps	150Amps	100Amps	50Amps	

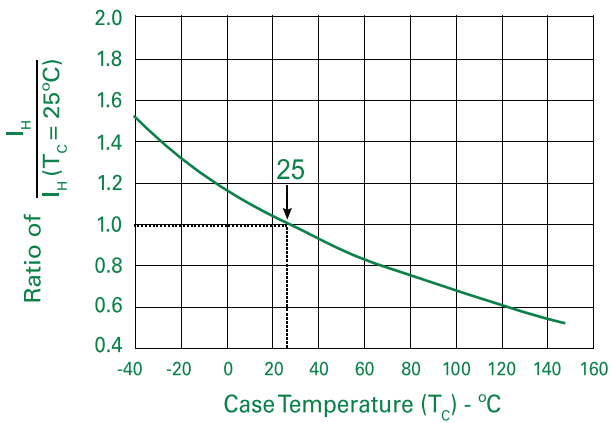
### $t_r \times t_d$ Pulse Waveform



### Normalized $V_S$ Change vs. Junction Temperature

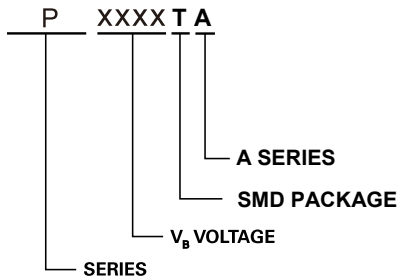


### Normalized DC Holding Current vs. Case Temperature

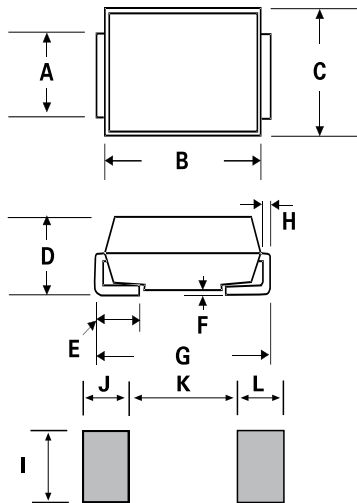


Reflow Parameter	Lead-Free Requirement
Preheat (depending on flux only)	
Temperature Min	150°C
Temperature Max	200°C
Time (Min to Max)	60-180 seconds
Solder Pot Temperature	245-265°C (Max)
Solder Dwell Time	2-3.5 seconds
Cooling	-6°C/second (Max)

## Part Numbering



## Package DO214AC/SMA



Dimensions	Inches		Millimeters	
	Min	Max	Min	Max
A	0.049	0.065	1.250	1.650
B	0.157	0.177	3.990	4.500
C	0.100	0.110	2.540	2.790
D	0.078	0.090	1.980	2.290
E	0.030	0.060	0.780	1.520
F	-	0.008	-	0.203
G	0.194	0.208	4.930	5.280
H	0.006	0.012	0.152	0.305
I	0.070	-	1.800	-
J	0.082	-	2.100	-
K	-	0.090	-	2.300
L	0.082	-	2.100	-

## Packing Options

Package Type	Description	Quantity
SMA	PXXXXTA	5000pcs