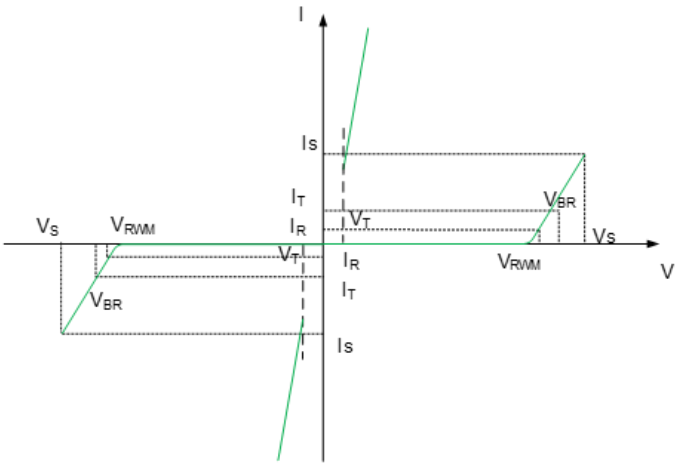
TSS components are solid state crowbar devices designed to protect telecom equipment during transient conditions， as follows:

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

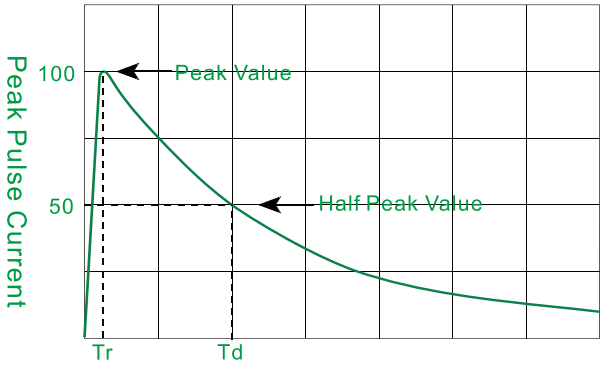
Notes:

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

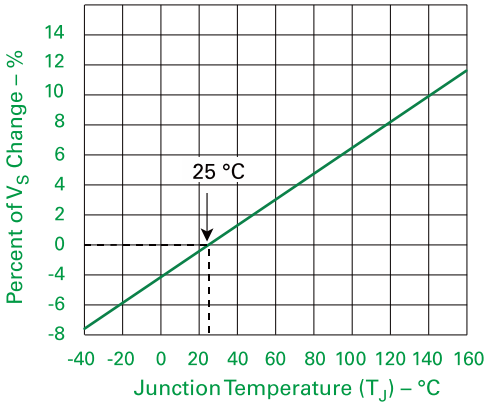
Surge Ratings

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

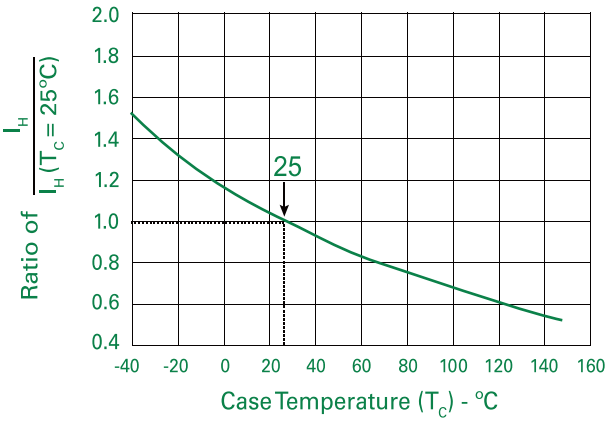
t_r x t_d Pulse Waveform



Normalized V_S Change vs. Junction Temperature

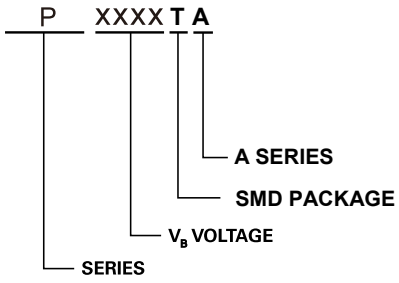


Normalized DC Holding Current vs. Case Temperature

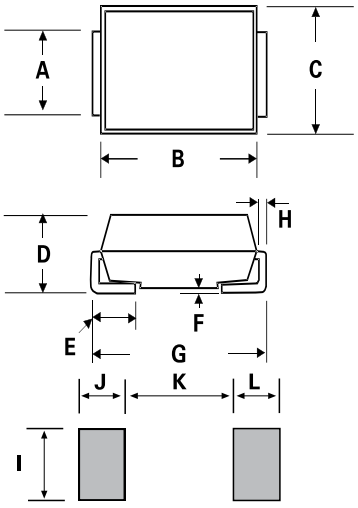


Reflow Parameter	Lead-Free Requirement
Preheat (depending on flux only) Temperature Min Temperature Max Time (Min to Max)	 150°C 200°C 60–180 seconds
Solder Pot Temperature	245–265°C (Max)
Solder Dwell Time	2–3.5 seconds
Cooling	-6°C/second (Max)

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