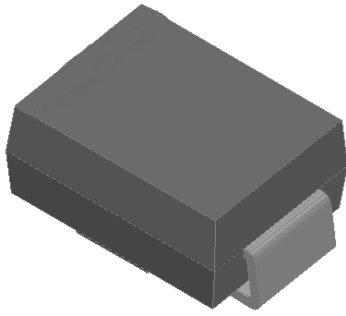


## Thyristor Surge Suppressors



### Features

- Low switching voltage
- Low on-state voltage
- Does not degrade surge capability after multiple surge events within limit
- Fails short circuit when surged in excess of ratings
- Low Capacitance

### Typical Applications

- Protect circuit

### Mechanical Data

- **Package:** DO-214AA (SMB)  
Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant, halogen-free
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102



### ■ Maximum Ratings (T<sub>a</sub>=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	Max
Storage temperature	T <sub>stg</sub>	°C	-55~+150
Junction temperature	T <sub>j</sub>	°C	-55~+150
Thermal resistance(Typical)	R <sub>θJ-A</sub>	°C/W	80
	R <sub>θJ-C</sub>	°C/W	4.5

### ■ Thermal Characteristics (T<sub>a</sub>=25°C Unless otherwise specified)

Part Number	V <sub>drm</sub> @I <sub>drm</sub> =5μA (V)	V <sub>s</sub> @100V/μs (V)	V <sub>t</sub> @I <sub>t</sub> =2.2Amps (V)	I <sub>drm</sub> @V <sub>drm</sub> (μA)	I <sub>s</sub> (mA)	I <sub>t</sub> (A)	I <sub>h</sub> (mA)	C <sub>o</sub> @1MHz,2V bias (pF)
	Min	Max	Max	Max	Max	Max	Min	Typ.
P0080S_	6	25	4	5	800	2.2	50	60
P0300S_	25	40	4	5	800	2.2	50	65
P0640S_	58	77	4	5	800	2.2	150	45
P0720S_	65	88	4	5	800	2.2	150	45
P0721S_	64	72	4	5	800	2.2	150	45
P0900S_	75	98	4	5	800	2.2	150	40
P1100S_	90	130	4	5	800	2.2	150	40
P1300S_	120	160	4	5	800	2.2	150	40
P1500S_	140	180	4	5	800	2.2	150	35
P1800S_	170	220	4	5	800	2.2	150	65
P2000S_	180	220	4	5	800	2.2	150	60
P2300S_	190	260	4	5	800	2.2	150	60
P2600S_	220	300	4	5	800	2.2	150	45
P3100S_	275	350	4	5	800	2.2	150	45
P3500S_	320	400	4	5	800	2.2	150	40
P4000S_	360	460	4	5	800	2.2	150	40
P4500S_	400	540	4	5	800	2.2	150	40
P5000S_	440	600	4	5	800	2.2	150	40

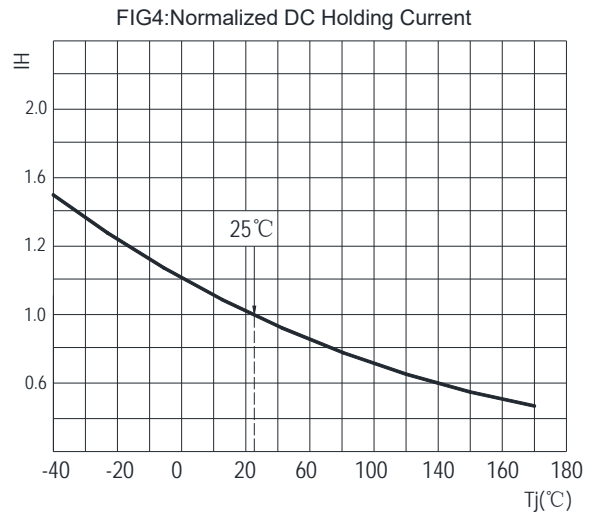
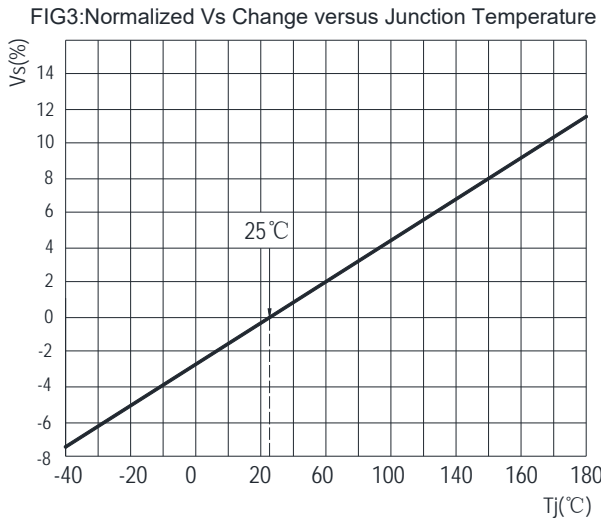
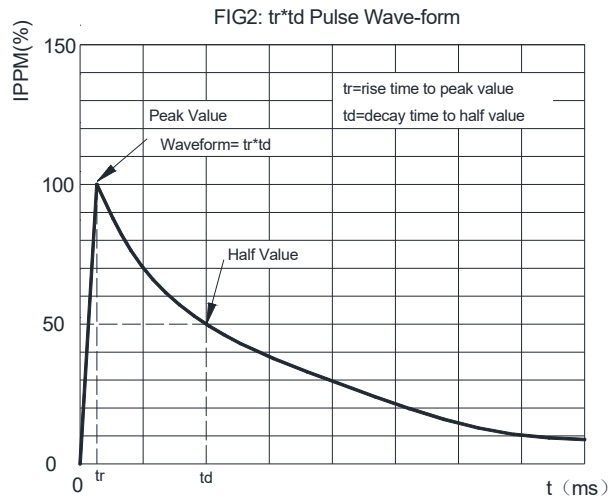
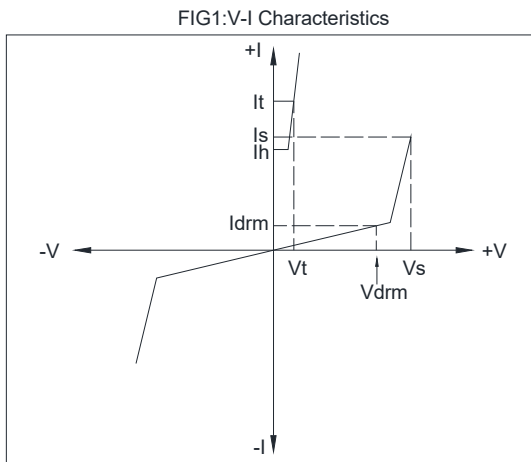


# SMBJ TSS SERIES

For individual “SA”, “SB”, and “SC” surge ratings, see table below.

Series	$I_{pp}$ 2/10us (A)	$I_{pp}$ 8/20us (A)	$I_{pp}$ 10/160us (A)	$I_{pp}$ 10/560us (A)	$I_{pp}$ 10/1000us (A)	$I_{tsm}$ 60Hz (A)	$di/dt$ (A)
	Min	Min	Min	Min	Min	Min	Typ.
A	150	150	90	50	45	20	500
B	250	250	150	100	80	30	500
C	500	400	200	150	100	50	500

## ■ Characteristics (Typical)



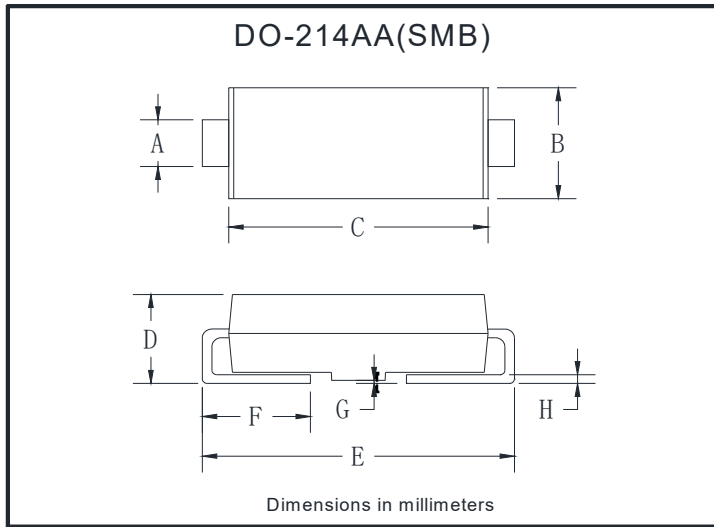
## ■ Ordering Information (Example)

PREFERED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
P0080SA-P3500SC	F1	Approximate 0.0975	3000	6000	48000	13" reel
P0080SA-P3500SC	F2	Approximate 0.0975	750	3000	24000	7" reel
P0080SA-P3500SC	F3	Approximate 0.0975	500	2000	16000	7" reel



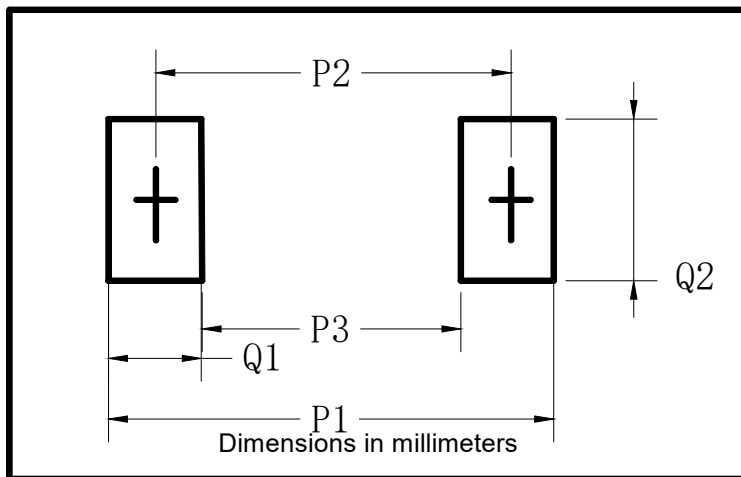
## SMBJ TSS SERIES

### ■ Outline Dimensions



DO-214AA(SMB)		
Dim	Min	Max
A	1.85	2.20
B	3.30	3.94
C	4.06	4.75
D	1.95	2.61
E	5.21	5.59
F	0.76	1.52
G	0.05	0.20
H	0.15	0.35

### ■ Suggested pad layout



DO-214AA(SMB)	
Dim	Millimeters
P1	6.8
P2	4.3
P3	1.8
Q1	2.5
Q2	2.3



## SMBJ TSS SERIES

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