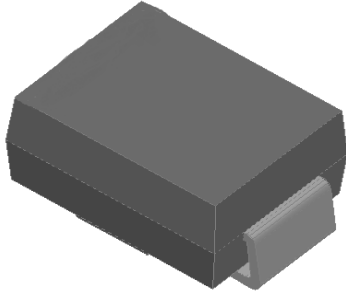


Thyristor Surge Suppressors



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_a=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	Max
Storage temperature	T _{stg}	°C	-55~+150
Junction temperature	T _j	°C	-55~+150
Thermal resistance(Typical)	R _{θJ-A}	°C/W	80
	R _{θJ-C}	°C/W	4.5

■ Thermal Characteristics (T_a=25°C Unless otherwise specified)

Part Number	V _{drm} @I _{drm} =5μA (V)	V _s @100V/μs (V)	V _t @I _t =2.2Amps (V)	I _{drm} @V _{drm} (μA)	I _s (mA)	I _t (A)	I _h (mA)	C _o @1MHz,2V bias (pF)
	Min	Max	Max	Max	Max	Max	Min	Typ.
P0080S_	6	25	4	5	800	2.2	30	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



SMBJ TSS SERIES

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

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

■ Characteristics (Typical)

FIG1: V-I Characteristics

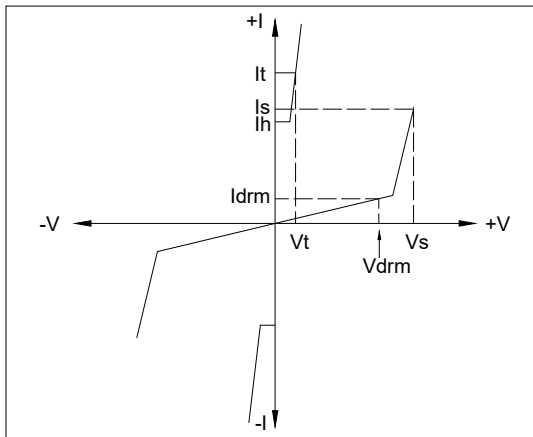


FIG2: $t_r * t_d$ Pulse Wave-form

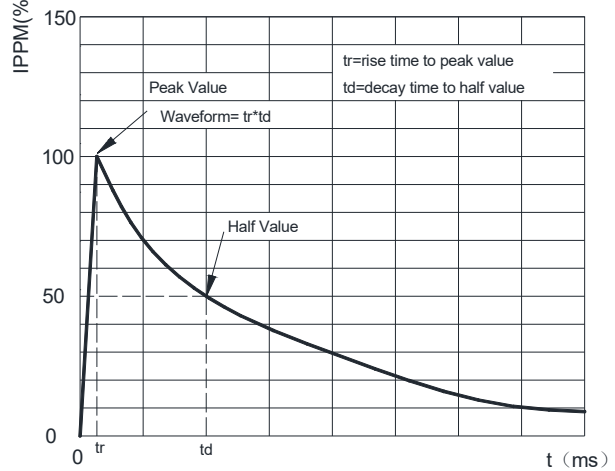


FIG3: Normalized V_s Change versus Junction Temperature

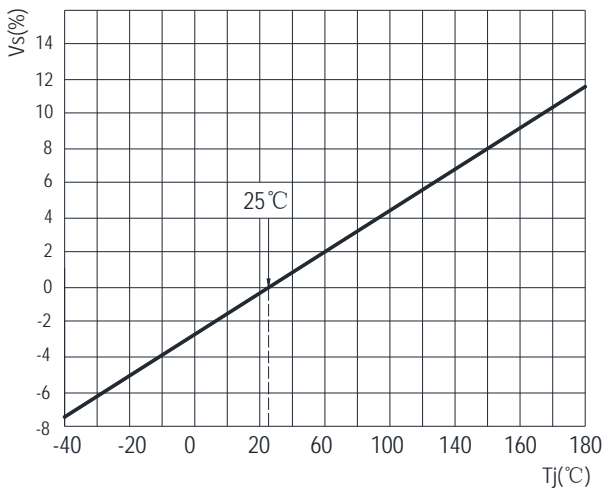
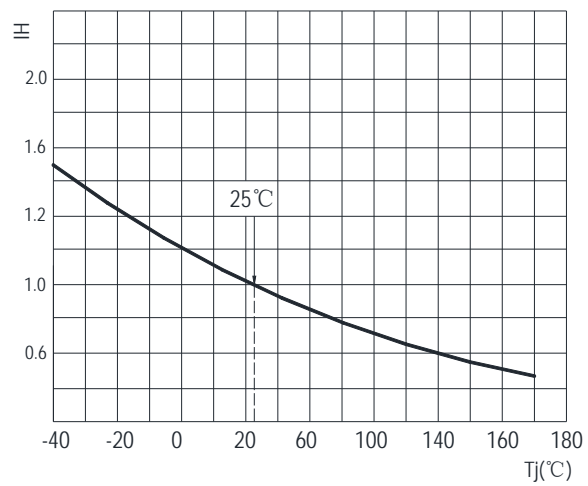


FIG4: Normalized DC Holding Current



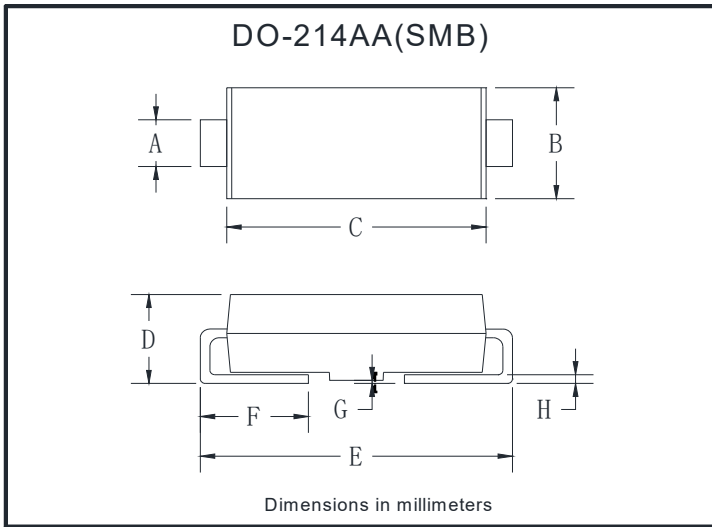
■ Ordering Information (Example)

PREFERRED 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	/	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



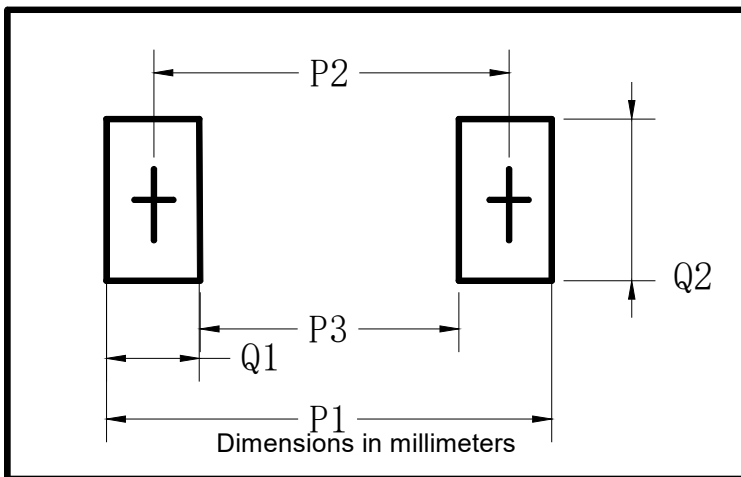
SMBJ TSS SERIES

■ Outline Dimensions



DO-214AA(SMB)		
Dim	Min	Max
A	1.85	2.20
B	3.30	3.94
C	4.05	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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