

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, -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 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)	Co @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	120	45
P0720S_	65	88	4	5	800	2.2	120	45
P0900S_	75	98	4	5	800	2.2	120	40
P1100S_	90	130	4	5	800	2.2	120	40
P1300S_	120	160	4	5	800	2.2	120	40
P1500S_	140	180	4	5	800	2.2	120	35
P1800S_	170	220	4	5	800	2.2	120	65
P2300S_	190	260	4	5	800	2.2	120	60
P2600S_	220	300	4	5	800	2.2	120	45
P3100S_	275	350	4	5	800	2.2	120	45
P3500S_	320	400	4	5	800	2.2	120	40
P4000S_	360	460	4	5	800	2.2	120	40

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

Series	Ipp 10/700us (A)	Ipp 8/20us (A)	Ipp 10/1000us (A)
	Min	Min	Min
A	50	150	45
B	100	250	80
C	150	400	100

■ Characteristics (Typical)

FIG1:V-I Characteristics

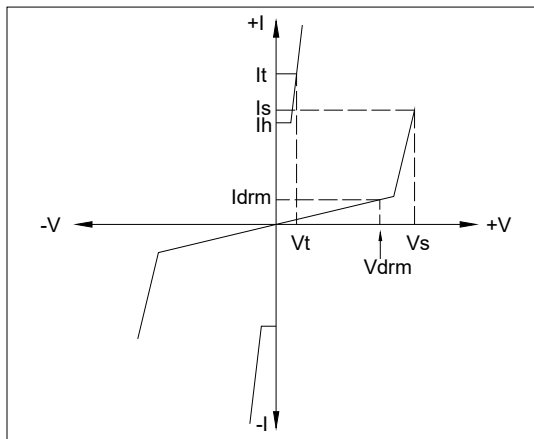


FIG2: tr*td Pulse Wave-form

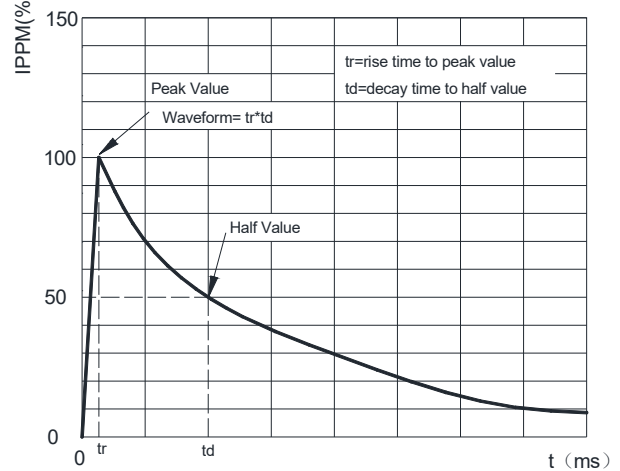


FIG3:Normalized Vs Change versus Junction Temperature

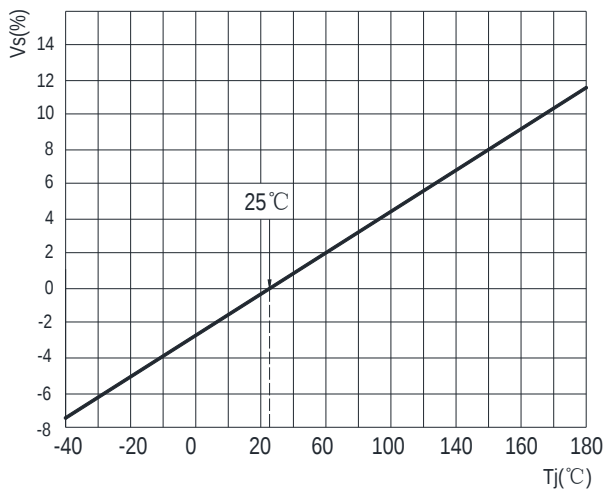
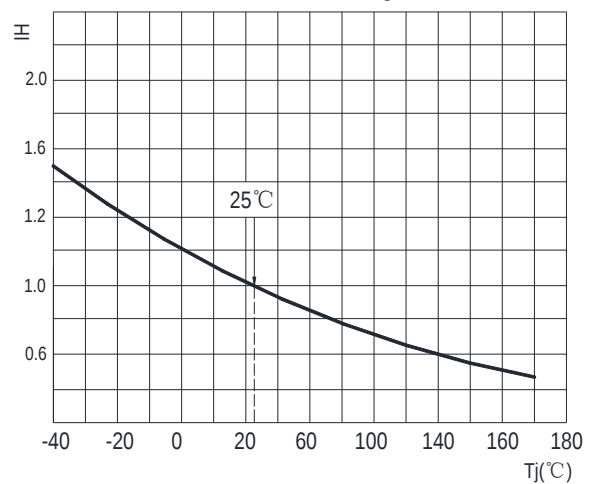


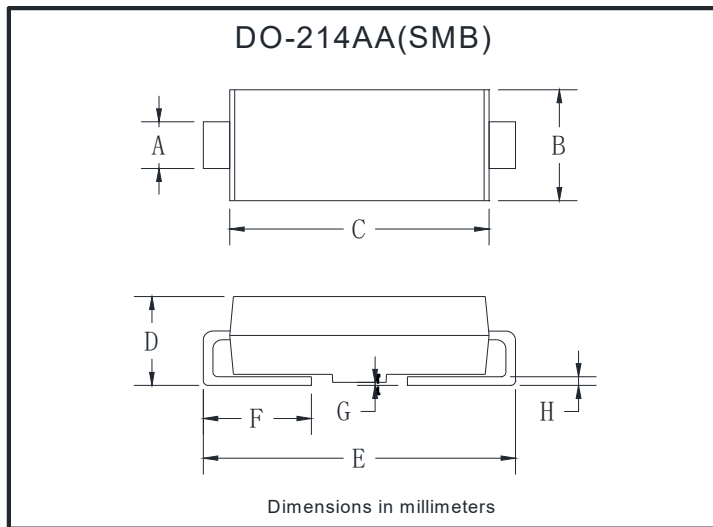
FIG4:Normalized DC Holding Current



■ Ordering Information (Example)

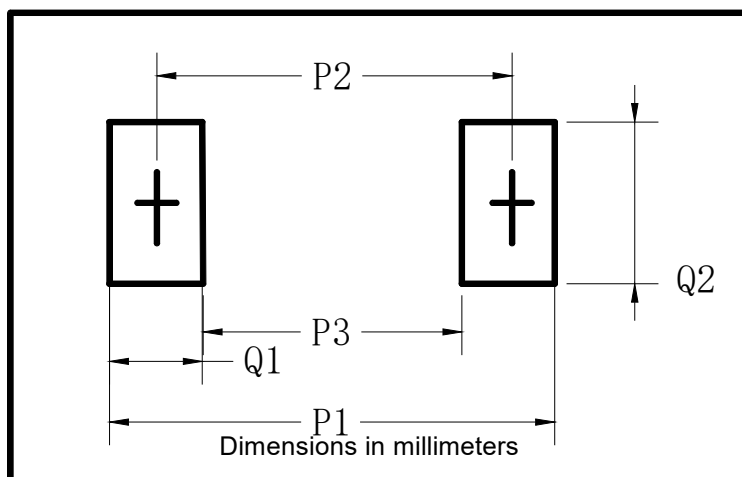
PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
P0080SA-P4000SC	F1	Approximate 0.0975	3000	/	48000	13" reel

■ 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

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