

SMA TSS SERIES

Thyristor Surge Suppressors



Features

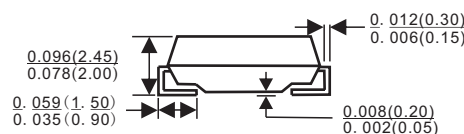
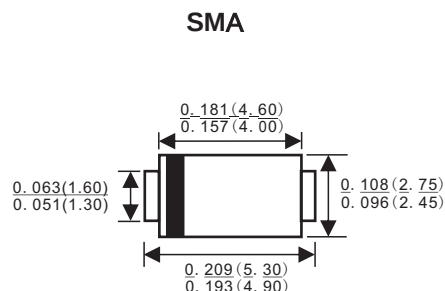
- Low switching voltage
- Low on-state voltage
- Does not degrade surge capability after multiple surge events within limit
- Fails short circuit when surged in excess of ratings
- Low Capacitance

Typical Applications

- Protect circuit

Mechanical Data

- **Package:** DO-214AC(SMA)
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



Dimensions in inches and (millimeters)

■Maximum Ratings ($T_a=25^\circ\text{C}$ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	Max
Storage temperature	T_{stg}	$^\circ\text{C}$	-55~+150
Junction temperature	T_j	$^\circ\text{C}$	-55~+150

■Thermal Characteristics ($T_a=25^\circ\text{C}$ Unless otherwise specified)

Part Number	V_{drm} @ $I_{drm}=5\mu\text{A}$ (V)	V_s (V)	V_t @ $I_t=2.2\text{Amps}$ (V)	$I_{drm}@V_{drm}$ (μA)	I_s (mA)	I_t (A)	I_h (mA)	C_o @1MHz, 2V bias (pF)	Marking
	Min	Max	Max	Max	Max	Max	Min	Typ.	
P0080TA	6	25	4	5	800	2.2	30	60	P008A
P0300TA	25	40	4	5	800	2.2	50	65	P03A
P0640TA	58	77	4	5	800	2.2	150	45	P06A
P0720TA	65	88	4	5	800	2.2	150	45	P07A
P0900TA	75	98	4	5	800	2.2	150	40	P09A
P1100TA	90	130	4	5	800	2.2	150	40	P11A
P1300TA	120	160	4	5	800	2.2	150	40	P13A
P1500TA	140	180	4	5	800	2.2	150	35	P15A
P1800TA	170	220	4	5	800	2.2	150	65	P18A
P2000TA	180	220	4	5	800	2.2	150	60	P20A
P2300TA	190	260	4	5	800	2.2	150	60	P23A
P2600TA	220	300	4	5	800	2.2	150	45	P26A
P3100TA	275	350	4	5	800	2.2	150	45	P31A
P3500TA	320	400	4	5	800	2.2	150	40	P35A
P4000TA	360	460	4	5	800	2.2	150	40	P40A

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

Series	Ipp 2/10us (A)	Ipp 8/20us (A)	Ipp 10/160us (A)	Ipp 10/560us (A)	Ipp 10/1000us (A)	ItSM 60Hz (A)	di/dt (A/μS)
	Min	Min	Min	Min	Min	Min	Min
A	150	150	90	50	45	20	500

■ Characteristics (Typical)

FIG1: V-I Characteristics

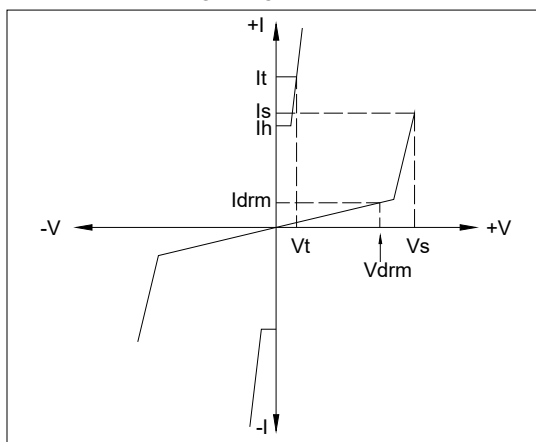


FIG2: tr*td Pulse Wave-form

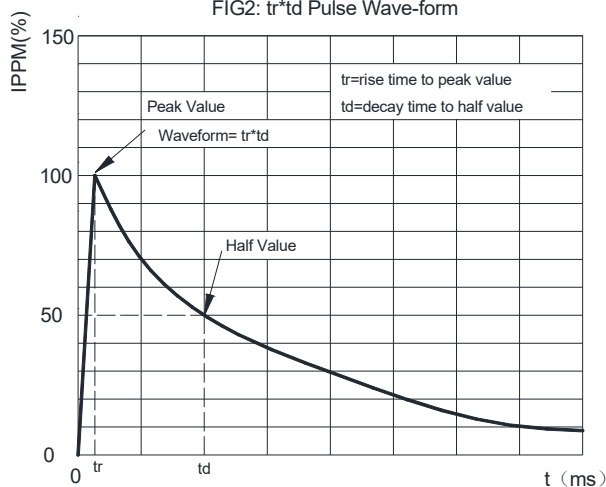


FIG3: Normalized Vs Change versus Junction Temperature

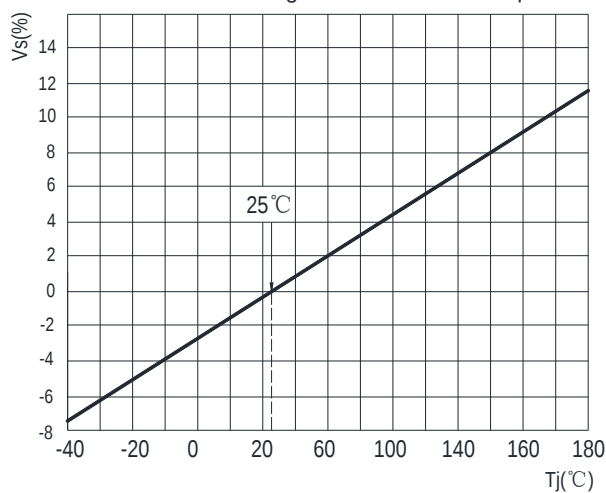
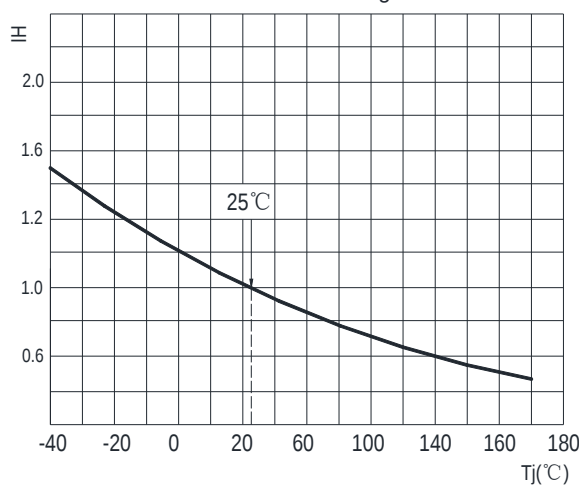


FIG4: Normalized DC Holding Current



■ Ordering Information (Example)

PREFERED P/N	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
P0080TA-P4000TA	Approximate 0.064	5000	10000	80000	11" reel