

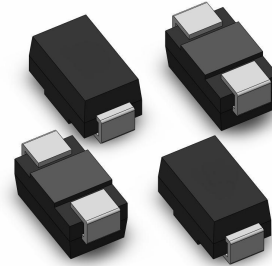
Thyristor Surge Suppressors TSS - TA series

Description:

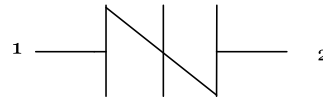
TSS Thyristor solid state protection thyristor protect telecommunications equipment such as modems, line cards, fax machines, and other CPE.

TSS Series devices are used to enable equipment to meet various regulatory requirements including GR 1089, ITU K.20, K.21 and K.45, IEC 60950, and TIA-968 (formerly known as FCC Part 68).

Appearance:



Schematic Symbol



Features:

- Low Capacitance
- Excellent capability of absorbing transient surge
- Quick response to surge voltage (ns Level)
- Eliminates over voltage caused by fast rising transients
- Moisture sensitivity level: Level1
- Weight 69 mg(approximate)
- Non degenerative

Packaging :

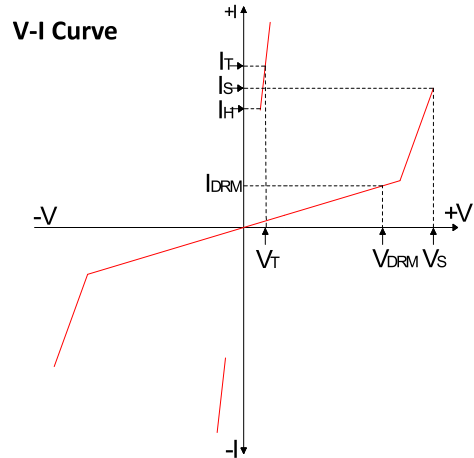
Part Number	Component Package	Quantity	Packaging
P***0TA	DO-214AC (SMA)	5000 PCS	Tape & Reel

Maximum Ratings ((TA=25°C, RH=45%-75%, unless otherwise noted)

Parameter	Symbol	Value	Unit
Storage temperature range	T _{stg}	-60 to +150	A
Operating junction temperature range	T _j	-40 to +150	A
Thermal Resistance; Junction to Ambient	R _{θJA}	90	°C/W

Electrical Characteristics (TA= 25 °C unless otherwise noted)

V_{DRM}	Peak off-state voltage
I_{DRM}	Off-state current @ V_{DRM}
V_S	Switching voltage
I_S	Switching current
V_T	On-state voltage
I_T	On-state current
I_H	Holding current
C_o	Off-state capacitance



Part Number	V_{DRM}	I_{DRM}	V_S	I_S	V_T	I_T	I_H	C_o
	min V	max μA	max V	max mA	max V	max A	max mA	\leq pF
P0080TA	6	5	25	800	4	2.2	50	50
P0080TA-LC	6	5	25	800	4	2.2	20	13
P0150TA	12	5	35	800	4	2.2	45	125
P0220TA	15	5	35	800	4	2.2	50	100
P0220TA-LC	15	5	32	800	4	2.2	20	25
P0300TA	25	5	40	800	4	2.2	50	30
P0300TA-LC	25	5	40	800	4	2.2	50	30
P0640TA	58	5	77	800	4	2.2	120	30
P0720TA	65	5	87	800	4	2.2	120	30
P0900TA	75	5	98	800	4	2.2	120	30
P1100TA	90	5	130	800	4	2.2	120	30
P1300TA	120	5	160	800	4	2.2	120	30
P1500TA	140	5	180	800	4	2.2	120	30
P1800TA	170	5	220	800	4	2.2	120	30
P2300TA	190	5	260	800	4	2.2	120	25
P2600TA	220	5	300	800	4	2.2	120	25
P3100TA	275	5	350	800	4	2.2	120	25
P3500TA	320	5	400	800	4	2.2	120	20
P3800TA	340	5	450	800	4	2.2	120	20

Surge Ratings

Series	Min IPP (A)			
	2×10 μs	8×20 μs	10×360 μs	10×1000 μs
TSS -TA	100	90	50	35

Typical Characteristics

Figure.1: Normalized Vs change vs.junction Temperature.

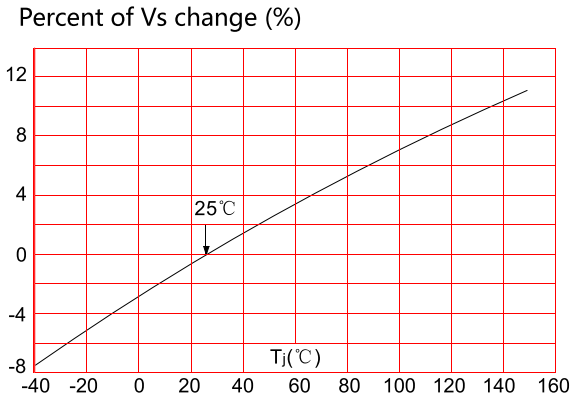


Figure.2: Normalized DC holding current vs. case Temperature

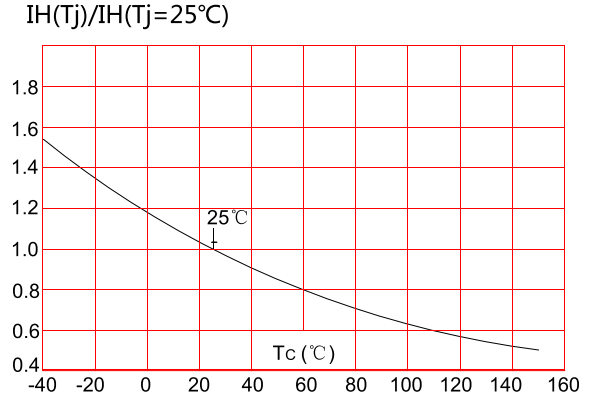


Figure.3: tr × td pulse waveform

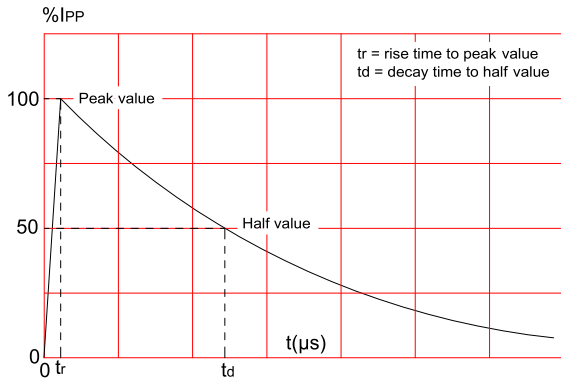
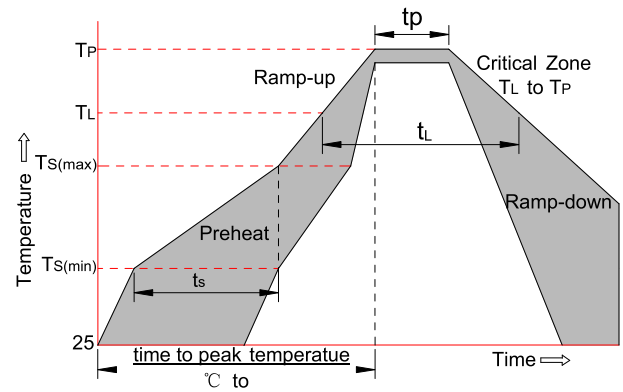


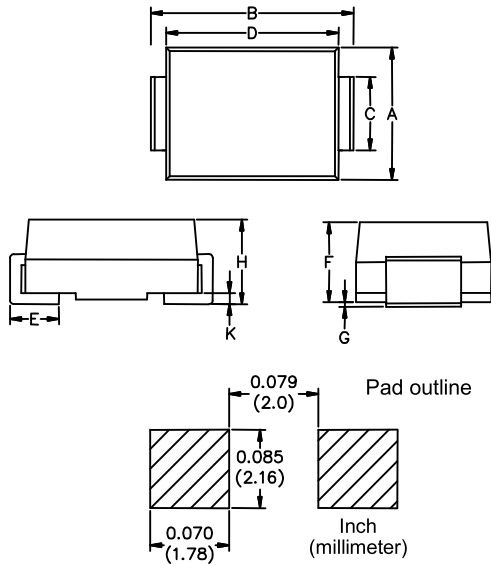
Figure.4: Reflow condition



Soldering Parameters

Profile Feature		Pb-Free Assembly
Average Ramp-Up Rate (TS max to TP)		3°C/ second max.
Preheat	Temperature Min (TS min)	150°C
	Temperature Max (TS max)	200°C
	Time(TSmin to TS max)	60-180 seconds
Reflow	Temperature(TL)	217°C
	Time (TL)	60-150 seconds
Peak/Classification Temperature(TP):		260°C
Ramp-down Rate:		6°C/ second max.
Time 25°C to Peak Temperature		8 minutes max.
Do not exceed		+260°C

Outline Drawing



Dimensions	Inches		Millimeters	
	Min	Max	Min	Max
A	0.098	0.114	2.50	2.90
B	0.194	0.208	4.93	5.28
C	0.053	0.065	1.35	1.65
D	0.167	0.183	4.25	4.65
E	0.030	0.060	0.76	1.52
F	0.076	0.087	1.93	2.21
G	0.002	0.008	0.051	0.203
H	0.078	0.095	1.98	2.41
K	0.006	0.012	0.15	0.31

DO-214AC

Tape and Reel Specifications

