



TSS Thyristor Surge Suppressors P0080TB Semiconductor Component DO-214AC SMA

Our Product Introduction

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Basic Information

- Place of Origin: Shenzhen, Guangdong, China
- Brand Name: SOCAY
- Certification: REACH,RoHS,ISO
- Model Number: P0080TB
- Minimum Order Quantity: 5000PCS
- Price: Negotiable
- Packaging Details: AMMO packing bulk
- Delivery Time: 5-8 work days



Product Specification

- Item: TSS DIODES
- Package Type: DO-214AC/SMA
- VDRM (Min.): 6V
- IDRM: 5μA
- Vs @100V/μS (Max.): 25V
- Is (Max.): 800mA
- Vt @It=2.2A (Max.): 4V
- It (Max.): 2.2A
- Ih (Min.): 50mA
- C0 @1MHz,2V Bias (Typ.): 130pF
- Highlight: TSS Thyristor Surge Suppressors,
Thyristor Surge Suppressors P0080TB,
Semiconductor Component DO-214AC



More Images



Our Product

Product Description

TSS Thyristor Surge Suppressors P0080TB Semiconductor Component DO-214AC SMA

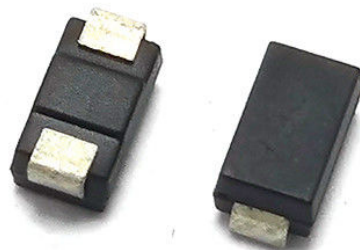
DATASHEET: [PXXX0TB_v2101.2.pdf](#)

Part of datasheet as below



Part Number	Marking	V_{DRM} @ $I_{DRM}=5\mu A$	V_S @ $100V/\mu s$	I_S	V_T @ $I_T=2.2A$	I_T	I_H	C_0 @1MHz, 2Vbias
		V Min.	V Max.	mA Max.	V max.	A max.	mA min.	pF typ.
P0080TB	P008B	6	25	800	4	2.2	50	130
P0220TB	P22B	15	30	800	4	2.2	50	120
P0300TB	P03B	25	40	800	4	2.2	50	120
P0640TB	P06B	58	77	800	4	2.2	120	80
P0720TB	P07B	66	87	800	4	2.2	120	75
P0900TB	P09B	75	98	800	4	2.2	120	70
P1100TB	P11B	90	130	800	4	2.2	120	70
P1300TB	P13B	120	160	800	4	2.2	120	60
P1500TB	P15B	140	180	800	4	2.2	120	55
P1800TB	P18B	170	220	800	4	2.2	120	50
P2300TB	P23B	190	260	800	4	2.2	120	50
P2600TB	P26B	220	300	800	4	2.2	120	45
P3100TB	P31B	275	350	800	4	2.2	120	45
P3500TB	P35B	320	400	800	4	2.2	150	40

Notes:
 V_S is measured at 100KV/s;
Off-state Capacitance is measured in $V_{DC}=2V$, $V_{RMS}=1V$, $f=1MHz$.



Features:

- Surface mount design optimizes board space usage
- React quickly to rapidly rising transient voltages

Parameter	Symbol	Value	Unit
Storage Temperature Range	T_{stg}	-60 to +150	
Operating Junction Temperature Range	T_j	-40 to +150	
Repetitive Peak Pulse Current	I_{PP}	80	A

Parameter	Definition
I_S	Switching Current - maximum current required to switch to on state
I_{DRM}	Leakage Current - maximum peak off-state current measured at V_{DRM}

I_H	Holding Current - minimum current required to maintain on state
I_T	On-state Current - maximum rated continuous on-state current
V_S	Switching Voltage - maximum voltage prior to switching to on state
V_{DRM}	Peak Off-state Voltage - maximum voltage that can be applied while maintaining off state
V_T	On-state Voltage - maximum voltage measured at rated on-state current
C_0	Off-state Capacitance - typical capacitance measured in off state

Surge Ratings

Series	I_{PR} (A) min				
	$2 \times 10 \mu s$	$8 \times 20 \mu s$	$10 \times 360 \mu s$	$10 \times 700 \mu s$	$10 \times 1000 \mu s$
0080-0300	150	150	70	75	50
0640-3500	250	250	125	100	80

Ordering Information

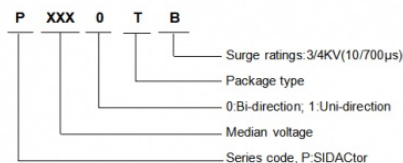


Fig.1: $t_r \times t_d$ pulse waveform

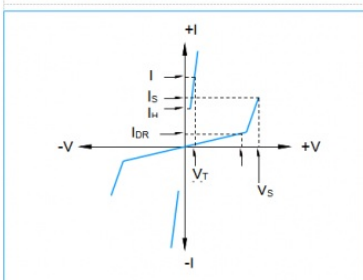


Fig.3: Normalized V_S change vs. junction temperature

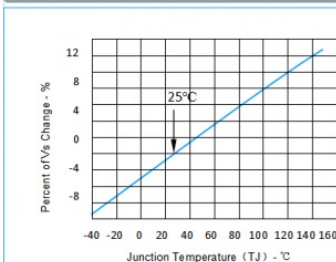


Fig.2: Reflow condition

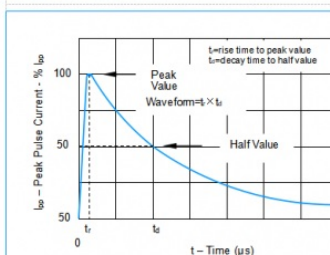
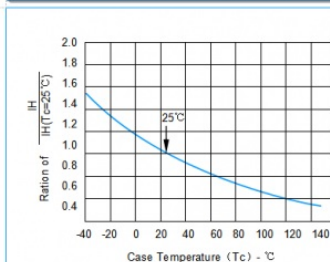
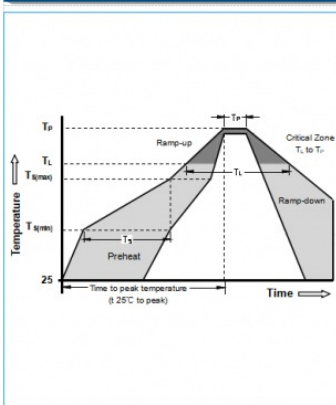


Fig.4: Normalized DC holding current vs. case temperature



Soldering Parameters



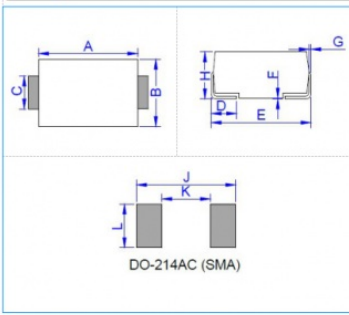
Reflow Condition		Pb-Free assembly
Pre Heat	-Temperature Min (T_{Lmin})	+150°C
	-Temperature Max (T_{Lmax})	+200°C
	-Time (Min to Max) (ts)	60-180 secs.
Average ramp up rate (Liquid us Temp (T_L) to peak)		3°C/sec. Max
T_{Lmax} to T_L - Ramp-up Rate		3°C/sec. Max
Reflow	-Temperature (T_L) (Liquid μs)	+217°C
	-Temperature (t_L)	60-150 secs.
Peak Temp (T_P)		+260(+0/-5)°C
Time within 5°C of actual Peak Temp (t_P)		8-15 secs.
Ramp-down Rate		6°C/sec. Max
Time 25°C to Peak Temp (T_P)		8 min. Max
Do not exceed		+260°C

Marking



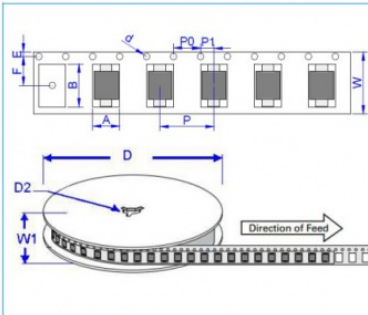
P-8B Device Marking Code

Package Mechanical Data



Ref.	Dimensions			
	Millimeters		Inches	
	Min	Max	Min	Max
A	4.25	4.65	0.167	0.183
B	2.50	2.90	0.098	0.114
C	1.35	1.65	0.053	0.065
D	0.76	1.52	0.030	0.060
E	4.93	5.28	0.194	0.208
F	0.051	0.203	0.002	0.008
G	0.15	0.31	0.006	0.012
H	1.98	2.41	0.078	0.095
J	6.80	—	0.268	—
K	—	2.60	—	0.102
L	2.40	—	0.094	—

Tape and Reel Specification-SMA



Ref.	Dimensions	
	Millimeters	Inches
A	2.79 ± 0.3	0.110 ± 0.012
B	5.33 ± 0.3	0.210 ± 0.012
d	1.5 ± 0.1	0.059 ± 0.004
D	330.0	13.0
D2	13 ± 1	0.512 ± 0.039
E	1.5 ± 0.2	0.059 ± 0.008
F	5.65 ± 0.2	0.222 ± 0.008
P	4.0 ± 0.2	0.157 ± 0.008
P0	4.0 ± 0.2	0.157 ± 0.008
P1	2.0 ± 0.2	0.079 ± 0.008
W	12.0 ± 0.2	0.472 ± 0.008
W1	16.8 ± 2.0	0.661 ± 0.079

Packing details

Outline	Reel (pcs)	Per Carton (pcs)	Reel Diameters (mm)
Taping	5,000	80,000	330

Selection Method

- 1, To know the customer's product, operating voltage, application port, protection level.
- 2, Break-state voltage > DC working voltage on the circuit.
- 3, Select the capacitance value and flow rate of the device according to the application port and protection level.



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