



DO-214AA SMB 8KV TSS Thyristor Surge Suppressors Low Capacitance 150pF P0080SD

Our Product Introduction

Basic Information

- Place of Origin: Shenzhen, Guangdong, China
- Brand Name: SOCAY
- Certification: REACH, RoHS, ISO
- Model Number: P0080SD
- Minimum Order Quantity: 3000PCS
- Price: Negotiable
- Packaging Details: AMMO packing bulk
- Delivery Time: 5-8 work days



Product Specification

- Product Name: Thyristor Surge Suppressors (TSS)
- Foot Size: DO-214AA/SMB
- VDRM (Min.): 6V
- IDRM: 5 μ A
- Vs @100V/ μ S (Max.): 25V
- Is (Max.): 800mA
- Vt @It=2.2A (Max.): 4V
- It (Max.): 2.2A
- Ih (Min.): 50mA
- C0 @1MHz, 2V Bias (Typ.): 150pF
- Highlight: 8KV Thyristor Surge Suppressors,
Thyristor Surge Suppressors 150pF

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Product Description

TSS P0080SD @10/700 μ S, 8KV Thyristor Surge Suppressors Low Capacitance 150pF

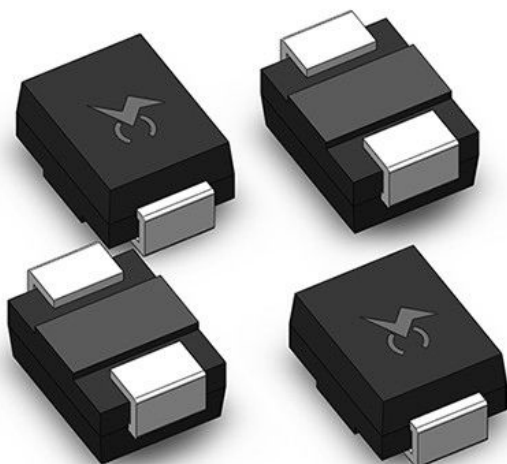
DATASHEET: [PXXX0SD_v2310.1.pdf](#)

Part Number	Marking	V _{DRM} @I _{DRM} =1 μ A	V _S @100V/ μ S	I _S	V _T @I _T =2.2 A	I _T	I _H	C0 @1MHz, 2V bias
		V Min.	V Max.	mA max.	V Max.	A Max.	mA Min.	pF Typ.
P0080SD	P-8D	6	15	800	4	2.2	50	150
P0640SD	P06D	58	77	800	4	2.2	50	150
P0720SD	P07D	65	87	800	4	2.2	50	150
P0900SD	P09D	75	98	800	4	2.2	50	140
P1100SD	P11D	90	130	800	4	2.2	50	110
P1300SD	P13D	120	160	800	4	2.2	50	100
P1500SD	P15D	140	180	800	4	2.2	50	90
P1800SD	P18D	170	220	800	4	2.2	50	90
P2300SD	P23D	190	260	800	4	2.2	50	80
P2600SD	P26D	220	300	800	4	2.2	50	70
P3100SD	P31D	275	350	800	4	2.2	50	60
P3500SD	P35D	320	400	800	4	2.2	50	60
P3800SD	P38D	340	450	800	4	2.2	50	60
P4200SD	P42D	400	520	800	4	2.2	100	40

Notes:

V_S is measured at 100KV/s.

Off-state capacitance is measured in V_{DC}=2V, V_{RMS}=1V, f=1MHz.



Description:

PXXX0SD Series are designed to protect broadband equipment such as modems, line card, CPE and DSL from damaging over-voltage transients.

The series provides a surface mount solution that enables equipment to comply with global regulatory standards.

Features:

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

Applicable Global Standards:

- u TIA-968-A
- u ITU K.20/21 Enhanced level
- u ITU K.20/21 Basic Level
- u GR 1089 Inter building
- u GR 1089 Inter building
- u IEC 6100-4-5
- u YD/T 1082
- u YD/T 993
- u YD/T 950

Series	2/10 μ S ¹	8/20 μ S ¹	10/160 μ S ¹	10/560 μ S ¹	10/1000 μ S ¹	5/310 μ S ¹	I _{TSM} 50/60 Hz	di/dt
	2/10 μ S ²	1.2/50 μ S ²	10/160 μ S ²	10/560 μ S ²	10/1000 μ S ²	10/700 μ S ²		
	A min	A min	A min	A min	A min	A min	A min	Amps/ μ s max
D	800	700	--	--	200	200	70	500
Notes: Current waveform in μ s Voltage waveform in μ s		- Peak pulse current rating (I _{PP}) is repetitive and guaranteed for the life of the product. - I _{PP} ratings applicable over temperature range of -40°C to +85°C - The device must initially be in thermal equilibrium with -40°C < T _J < +150°C						

Part Number	Component Package	Quantity	Packaging Option	Packaging Specification
Pxxx0SD	DO-214AA	3000	Tape & Reel - 12mm/13"tape	EIA -481 - D

Thermal Considerations

Package	Symbol	Parameter	Value	Unit
	T_J	Operating Junction Temperature Range	- 40 to + 150	°C
	T_S	Storage Temperature Range	- 40 to +150	°C
	$R_{\theta JA}$	Thermal Resistance: Junction to Ambient	90	°C/W

Figure 1 - V-I Characteristics

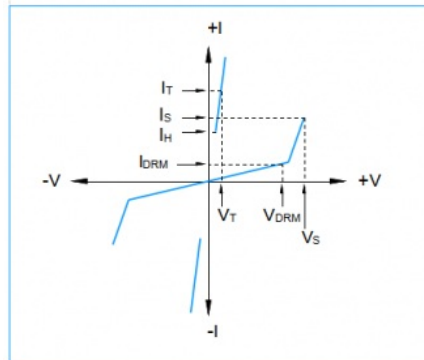


Figure 3 - Normalized V_S Change Versus Junction Temperature

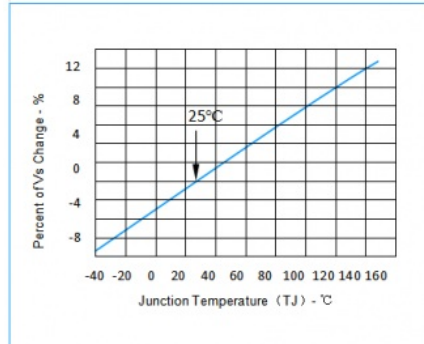


Figure 2 - $t_r \times t_d$ Pulse Waveform

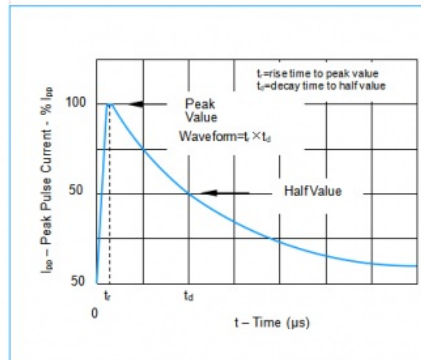
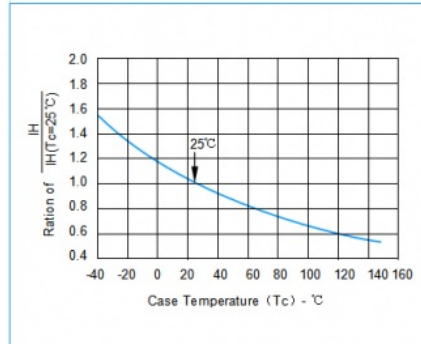
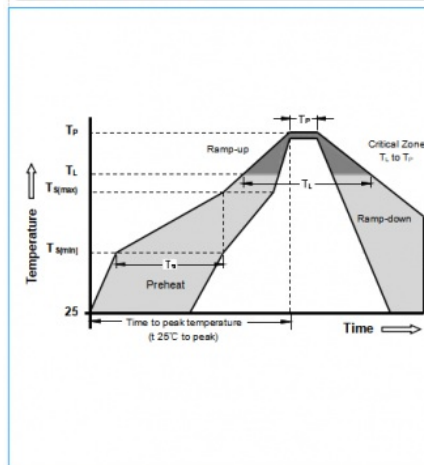


Figure 4 - Normalized DC Holding Current Versus Case Temperature

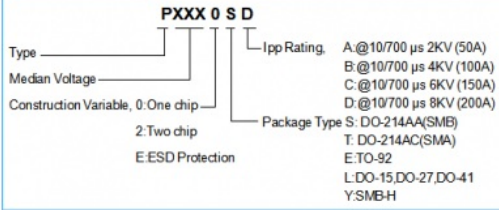


Soldering Parameters



Reflow Condition		Lead-free assembly
Pre Heat	-Temperature Min (T_{qmin})	+150°C
	-Temperature Max (T_{qmax})	+200°C
	-Time (min to max) (T_q)	60 - 180 Seconds
Average ramp up rate (Liquidus Temp T_L) to peak		3°C/Second Max
$T_{S(max)}$ to T_L - Ramp-up Rate		3°C/Second Max
Reflow	- Temperature (T_L) (Liquidus)	+217°C
	- Time (min to max) (T_L)	60 - 150 Seconds
Peak Temperature (T_P)		260 +0/-5°C
Time within 5°C of actual peak Temperature (t_p)		30 Seconds Max
Ramp-down Rate		6°C/Second Max
Time 25°C to peak Temperature (T_P)		8 minutes Max
Do not exceed		+260°C

Part Numbering

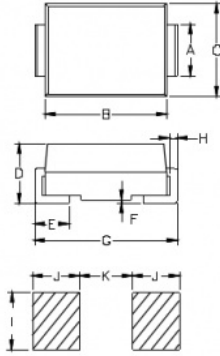


Part Marking



Dimensions

DO-214AA (SMB)



Dimensions	Inches		Millimeters	
	Min	Max	Min	Max
A	0.075	0.087	1.90	2.20
B	0.169	0.189	4.30	4.80
C	0.130	0.155	3.30	3.94
D	0.083	0.098	2.10	2.50
E	0.037	0.060	0.95	1.52
F	0.002	0.008	0.051	0.203
G	0.200	0.220	5.08	5.60
H	0.006	0.012	0.15	0.31
I	0.091	-	2.23	-
J	0.087	-	2.20	-
K	-	0.102	-	2.60

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