



P0720SC Thyristor Surge Suppressors SMD 500A 65V 100pF DO-214AA SMB

Our Product Introduction

for more products please visit us on socaydiode.com

Basic Information

- Place of Origin: Shenzhen, Guangdong, China
- Brand Name: SOCAY
- Certification: REACH,RoHS,ISO
- Model Number: P0720SC
- Minimum Order Quantity: 2500PCS
- Price: Negotiable
- Packaging Details: AMMO packing bulk
- Delivery Time: 5-8 work days



Product Specification

- Component: Thyristor Surge Suppressors
- Footprint: DO-214AA/SMB
- VDRM (Min.): 6V
- IDRM: 5μA
- Vs @100V/μS (Max.): 88V
- Is (Max.): 800mA
- Vt @It=2.2A (Max.): 4V
- It (Max.): 2.2A
- Ih (Min.): 50mA
- C0 @1MHz,2V Bias (Typ.): 100pF
- Highlight: P0720SC Thyristor Surge Suppressors,
Thyristor Surge Suppressors 500A,
Thyristor SMD 65V



More Images



Product Description

SOCAY P0720SC Thyristor Surge Protection Devices 500A 65V SMD Thyristor

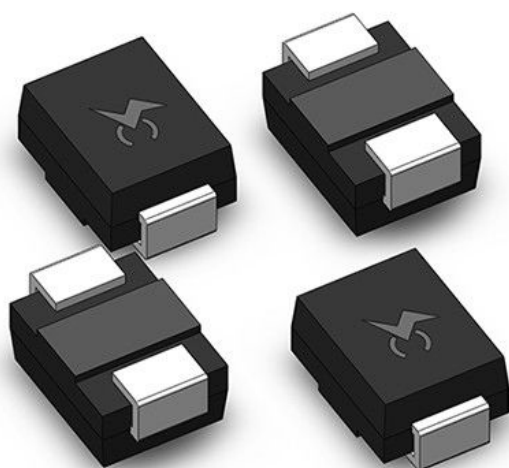
DATASHEET: [PXXX0SC_v2103.1.pdf](#)

Part Number	Marking	V_{DRM} @ $I_{DRM}=5$ μA	V_S @100V/ μS	V_T @ $I_T=2.2$ A	I_S	I_T	I_H	C_O @1MHz, 2V bias
		V min	V max	V max	mA max	A max	mA min	pF typ
P0080SC	P008C	6	25	4	800	2.2	50	100
P0300SC	P03C	25	40	4	800	2.2	50	100
P0640SC	P06C	58	77	4	800	2.2	150	100
P0720SC	P07C	65	88	4	800	2.2	150	100
P0900SC	P09C	75	98	4	800	2.2	150	90
P1100SC	P11C	90	130	4	800	2.2	150	90
P1300SC	P13C	120	160	4	800	2.2	150	90
P1500SC	P15C	140	180	4	800	2.2	150	85
P1800SC	P18C	170	220	4	800	2.2	150	85
P2300SC	P23C	190	260	4	800	2.2	150	80
P2600SC	P26C	220	300	4	800	2.2	150	80
P3100SC	P31C	275	350	4	800	2.2	150	65
P3500SC	P35C	320	400	4	800	2.2	150	60
P4200SC	P42C	400	520	4	800	2.2	150	55

Notes:

V_S is measured at 100KV/s.

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



Description: Tss components to protection important equipment PCB Circuit Board

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.

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:

Communication lightning protection, 485, 232 protection solutions, ADSL, Security products, Telephones, Video circuits, Audio circuits.

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
C	500	400	200	150	100	150	50	500

Notes: Current waveform in μs Voltage waveform in μs	- 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 $+85^{\circ}\text{C}$ - The device must initially be in thermal equilibrium with $-40^{\circ}\text{C} < T_J < +150^{\circ}\text{C}$
--	--

Part Number	Component Package	Quantity	Packaging Option	Packaging Specification
Pxxx0SC	DO-214AA	2500	Tape & Reel - 12mm/13"tape	EIA -481 - D

Thermal Considerations

Package	Symbol	Parameter	Value	Unit
 DO-214AA	T_J	Operating Junction Temperature Range	- 40 to + 150	$^{\circ}\text{C}$
	T_S	Storage Temperature Range	- 40 to +150	$^{\circ}\text{C}$
	$R_{\theta JA}$	Thermal Resistance: Junction to Ambient	90	$^{\circ}\text{C/W}$

Figure 1 - V-I Characteristics

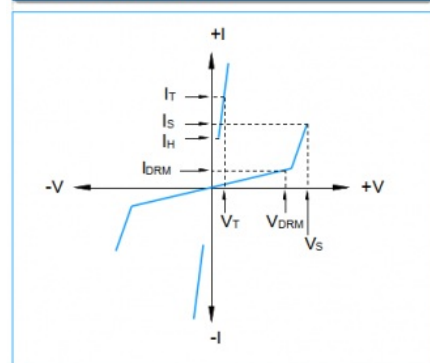


Figure 2 - $t_r \times t_d$ Pulse Waveform

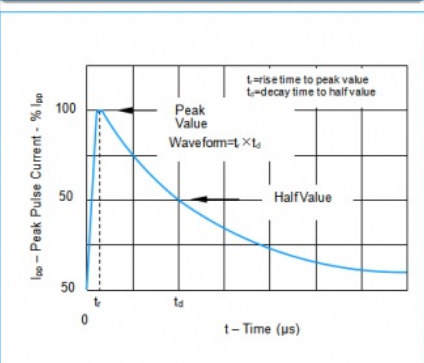


Figure 3 - Normalized V_S Change Versus Junction Temperature

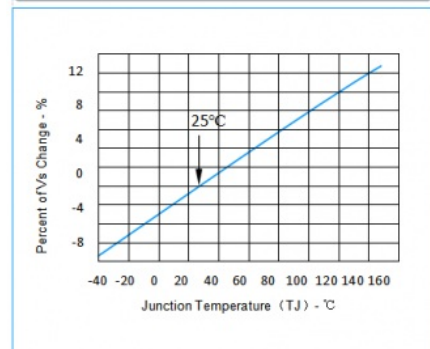
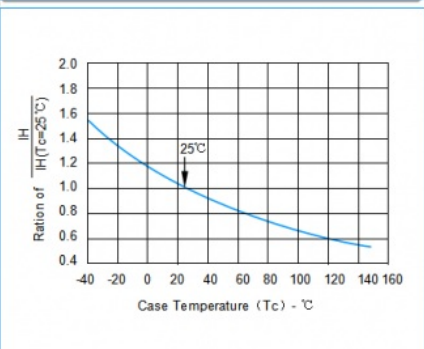
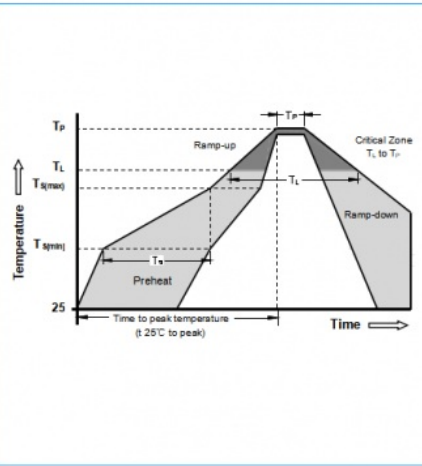


Figure 4 - Normalized DC Holding Current Versus Case Temperature



Soldering Parameters

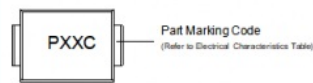


Reflow Condition		Lead-free assembly
Pre Heat	-Temperature Min ($T_{g(max)}$)	+150°C
	-Temperature Max ($T_{g(max)}$)	+200°C
	-Time (min to max) (T_g)	60 -180 Seconds
Average ramp up rate (Liquidus Temp T_L) to peak		3°C/Second Max
$T_{g(max)}$ to T_L - Ramp-up Rate		3°C/Second Max
Reflow	- Temperature (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

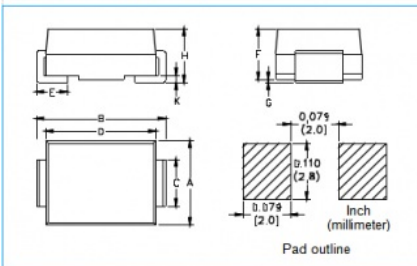
Part Numbering

Type	PXXX 0 S C
Median Voltage	
Construction Variable, 0: One chip	
2: Two chip	
E: ESD Protection	
Ipp Rating	A: @10/700 μ s 2KV (50A) B: @10/700 μ s 4KV (100A) C: @10/700 μ s 6KV (150A) D: @10/700 μ s 8KV (200A)
Package Type	S: DO-214AA(SMB) T: DO-214AC(SMA) E: TO-92 L: DO-15, DO-27, DO-41 Y: SMB-H

Part Marking



Dimensions DO-214AA



Dimensions	Inches		Millimeters	
	Min	Max	Min	Max
A	0.130	0.156	3.30	3.95
B	0.201	0.220	5.10	5.60
C	0.077	0.087	1.95	2.20
D	0.159	0.181	4.05	4.60
E	0.030	0.063	0.76	1.60
F	0.076	0.096	1.90	2.45
G	0.002	0.008	0.05	0.20
H	0.077	0.104	1.95	2.65
K	0.006	0.016	0.15	0.41

 **SOCAY® Shenzhen Socay Electronics Co., Ltd.**

 +8618126201429

 sylvia@socay.com

 socaydiode.com

4/F, Block C, HeHengXing Science & Technology Park, 19 MinQing Road, LongHua District, Shenzhen City, Guangdong Province, China