SOCAY TSS Thyristor Surge Suppressors 6KV P0080SC For Modems Line Card

Our Product Introduction

Basic Information

- Place of Origin: Shenzhen, Guangdong, China
- Brand Name: SOCAY
- Certification: REACH,RoHS,ISO
- Model Number: P0080SC
- Minimum Order Quantity: 2500PCS
- Price: Negotiable
- Packaging Details: AMMO packing bulk
- Delivery Time: 5-8 work days

Product Specification

- Product Name: Thyristor Surge Suppressors (TSS)
- Package Size: DO-214AA/SMB
- 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.): 100pF
- Highlight: **Thyristor Surge Suppressors 6KV**, **Modems Thyristor Surge Suppressors**, **P0080SC**

Product Description

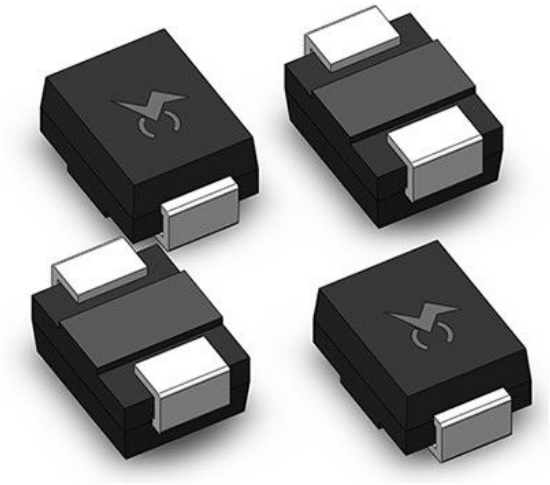
SOCAY (TSS) P0080SC Thyristor Surge Suppressors Used In Modems, Line Card, @10/700μS, 6KV

DATASHEET: PXXX0SC_v2103.1.pdf

Part Number	Marking	V_{DRM} @I_{DRM}=5 μA	VS @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:
Vs is measured at 100KV/s.
Off-state capacitance is measured in V_{DC}=2V, V_{RMS}=1V, f=1MHz.

SOCAY®



Description:

PXXX0SC 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	2/10μS[1]	8/20μS[1]	10/160μS[1]	10/560μS[1]	10/1000μS[1]	5/310μS[1]	I_{TSM} 50/60 Hz	di/dt
	2/10μS[2]	1.2/50μS[2]	10/160μS[2]	10/560μS[2]	10/1000μS[2]	10/700μS[2]		
	A min	A min	A min	A min	A min	A min	A min	Amps/μs 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 -40ºC to +85ºC - The device must initially be in thermal equilibrium with -40°C < T_J < +150°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	°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

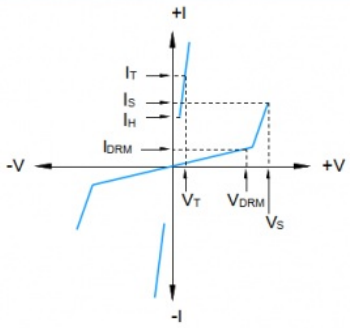


Figure 2 - $t_r \times t_d$ Pulse Waveform

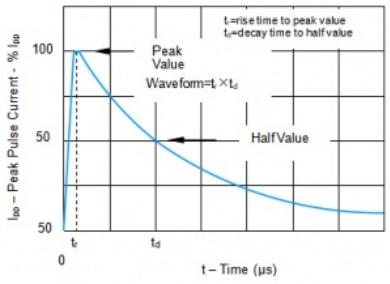


Figure 3 - Normalized V_S Change Versus Junction Temperature

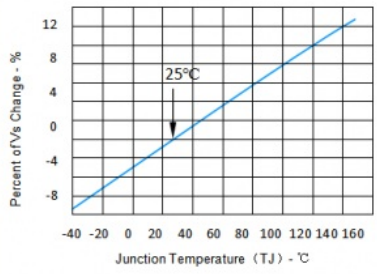
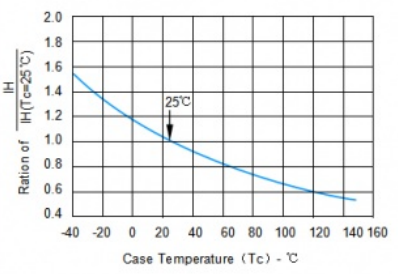
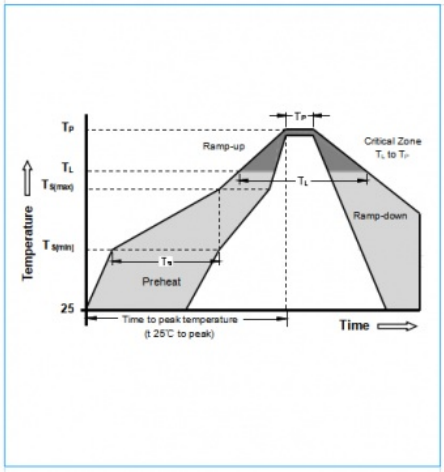


Figure 4 - Normalized DC Holding Current Versus Case Temperature

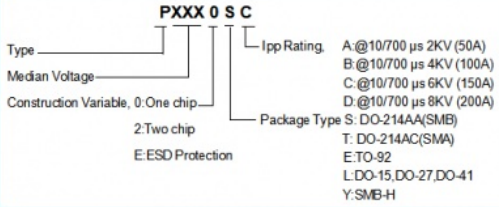


Soldering Parameters



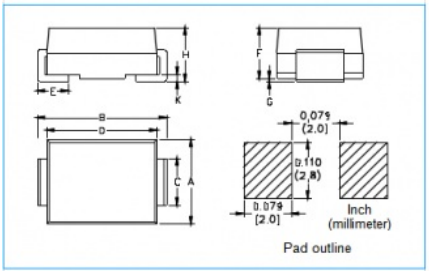
Reflow Condition		Lead–free assembly
Pre Heat	-Temperature Min ($T_{s(min)}$)	+150°C
	-Temperature Max ($T_{s(max)}$)	+200°C
	-Time (min to max) (T_s)	60 -180 Seconds
Average ramp up rate (Liquidus Temp T_L) to peak		3°C/Second Max
$T_{s(max)}$ to T_L - Ramp-up Rate		3°C/Second Max
Reflow	- Temperature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



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

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