

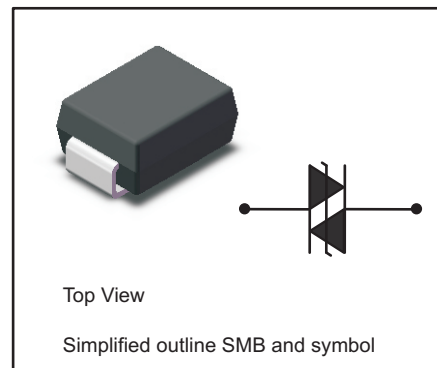
1-Line, Bi-directional, Thyristor Surge Suppressors

DESCRIPTION

TSS thyristors are a type of semiconduct component. They are designed for transient surge protection.

FEATURES

- Excellent capability of absorbing transient surge
- Quick response to surge voltage (ns Level)
- Eliminates overvoltage caused by fast rising transients
- Does not degrade surge capability after multiple surge within limit
- Fails short circuit when surged in excess of ratings
- Low leakage current



MECHANICAL DATA

- Case: SMB
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.09g / 0.003oz

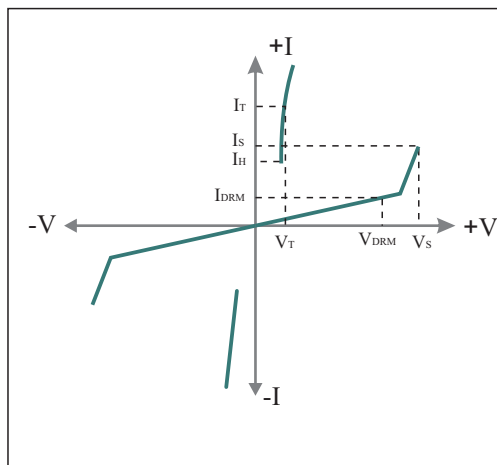
ABSOLUTE MAXIMUM RATINGS(TA=25°C,RH=45%-75%,unless otherwise noted)

Parameter	Symbol	Value	Unit
Storage temperature range	T_{stg}	-55 to+150	°C
Operating junction temperature range	T_j	Product of VDRM ≤ 90V	-55 to+125
		Product of VDRM > 90V	-55 to+150
Repetitive peak pulse current (10/1000us)	I_{PP}	45 *1	A
		80 *2	
		100 *2	

Note: *1 suffix A;*2 suffix B;*3 suffix C.

ELECTRICAL CHARACTERISTICS (TA=25°C)

Symbol	Parameter
V_{DRM}	Peak off-state voltage
I_{DRM}	Peak off-state current
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
V_{BR}	Reverse breakdown voltage
I_{BR}	Test current





ELECTRICAL CHARACTERISTICS(Ta=25°C,continued)

Part Number	V _{DRM}	I _{DRM}	V _s	I _s	I _H	V _T	I _T	Co ⁽¹⁾	Marking
	V	μA	V	mA	mA	V	A	pF	
	Min.	Max.	Max.	Max.	Min.	Max.	Max.	Typ.	
P0080SA	6	5	25	800	50	4	2.2	80	P-8A
P0300SA	25	5	40	800	50	4	2.2	40	P03A
P0640SA	58	5	77	800	120	4	2.2	65	P06A
P0720SA	65	5	88	800	120	4	2.2	65	P07A
P0900SA	75	5	98	800	120	4	2.2	50	P09A
P1100SA	90	5	130	800	120	4	2.2	50	P11A
P1300SA	120	5	160	800	120	4	2.2	50	P13A
P1500SA	140	5	180	800	120	4	2.2	50	P15A
P1800SA	170	5	220	800	120	4	2.2	60	P18A
P2100SA	180	5	240	800	120	4	2.2	60	P21A
P2300SA	190	5	260	800	120	4	2.2	60	P23A
P2600SA	220	5	300	800	120	4	2.2	50	P26A
P3100SA	275	5	350	800	120	4	2.2	40	P31A
P3500SA	320	5	400	800	120	4	2.2	40	P35A

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



ELECTRICAL CHARACTERISTICS(Ta=25°C,continued)

Part Number	V _{DRM}	I _{DRM}	V _s	I _s	I _H	V _T	I _T	Co ⁽¹⁾	Marking
	V	uA	V	mA	mA	V	A	pF	
	Min.	Max.	Max.	Max.	Min.	Max.	Max.	Typ.	
P0080SB	6	5	25	800	50	4	2.2	100	P-8B
P0300SB	25	5	40	800	50	4	2.2	50	P03B
P0640SB	58	5	77	800	120	4	2.2	80	P06B
P0720SB	65	5	88	800	120	4	2.2	80	P07B
P0900SB	75	5	98	800	120	4	2.2	70	P09B
P1100SB	90	5	130	800	120	4	2.2	65	P11B
P1300SB	120	5	160	800	120	4	2.2	60	P13B
P1500SB	140	5	180	800	120	4	2.2	60	P15B
P1800SB	170	5	220	800	120	4	2.2	80	P18B
P2100SB	180	5	240	800	120	4	2.2	80	P21B
P2300SB	190	5	260	800	120	4	2.2	80	P23B
P2600SB	220	5	300	800	120	4	2.2	70	P26B
P3100SB	275	5	350	800	120	4	2.2	50	P31B
P3500SB	320	5	400	800	120	4	2.2	45	P35B

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



ELECTRICAL CHARACTERISTICS(Ta=25°C,continued)

Part Number	V _{DRM}	I _{DRM}	V _s	I _s	I _H	V _T	I _T	Co ⁽¹⁾	Marking
	V	uA	V	mA	mA	V	A	pF	
	Min.	Max.	Max.	Max.	Min.	Max.	Max.	Typ.	
P008SC	6	5	25	800	50	4	2.2	120	P-8C
P0300SC	25	5	40	800	50	4	2.2	60	P03C
P0640SC	58	5	77	800	120	4	2.2	100	P06C
P0720SC	65	5	88	800	120	4	2.2	100	P07C
P0900SC	75	5	98	800	120	4	2.2	100	P09C
P1100SC	90	5	130	800	120	4	2.2	90	P11C
P1300SC	120	5	160	800	120	4	2.2	90	P130C
P1500SC	140	5	180	800	120	4	2.2	90	P15C
P1800SC	170	5	220	800	120	4	2.2	100	P18C
P2100SC	180	5	240	800	120	4	2.2	100	P21C
P2300SC	190	5	260	800	120	4	2.2	100	P23C
P2600SC	220	5	300	800	120	4	2.2	80	P26C
P3100SC	275	5	350	800	120	4	2.2	70	P31C
P3500SC	320	5	400	800	120	4	2.2	65	P35C

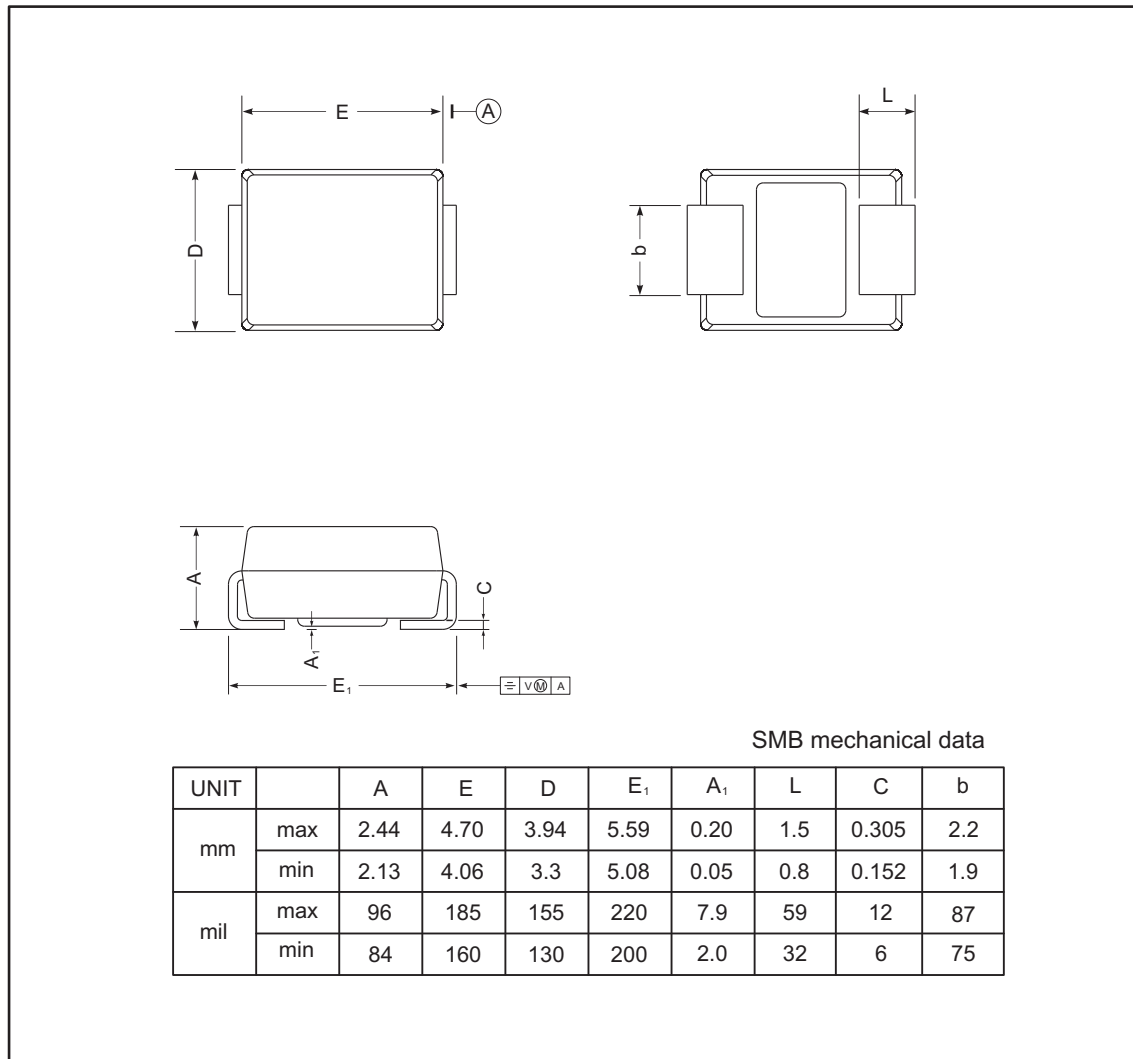
(1) Off-state capacitance is measured in V_{DC}=2V,f=1MHz



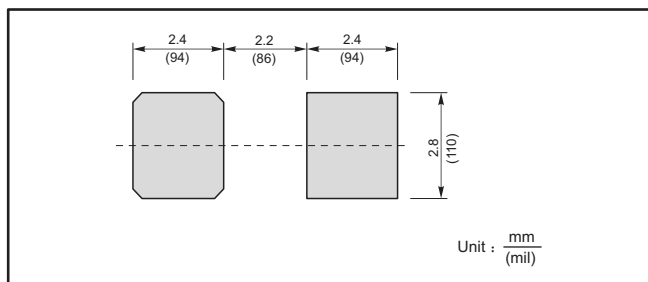
PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SMB



The recommended mounting pad size





文件履历表

序号	制/修订日期	生效日期	版次	修订内容	变更原因	制/修订人	备注
01	2022.6.13	2022.6.13	Rev 1.1	初版制定	/	张阁	



Important Notice and Disclaimer

Jingdao Microelectronics reserves the right to make changes to this document and its products and specifications at any time without notice. Customers should obtain and confirm the latest product information and specifications before final design, purchase or use.

Jingdao Microelectronics makes no warranty, representation or guarantee regarding the suitability of its products for any particular purpose, nor does Jingdao Microelectronics assume any liability for application assistance or customer product design.

Jingdao Microelectronics does not warrant or accept any liability with products which are purchased or used for any unintended or unauthorized application.

No license is granted by implication or otherwise under any intellectual property rights of Jingdao Microelectronics.

Jingdao Microelectronics products are not authorized for use as critical components in life support devices or systems without express written approval of Jingdao Microelectronics.