

Thyristors Surge Protection Device

Features

- Low voltage overshoot
- Low on-state voltage
- Low capacitance
- Low leakage current
- High reliability
- Quick response to surge voltage (ns Level)
- Eliminates overvoltage caused by fast rising transients.

Applications

- Audio/Video line
- Network and telecom
- Data lines and security systems
- Serial ports
- xDSL Architecture Interface

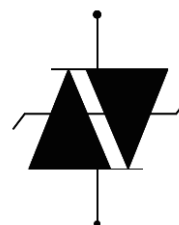
Mechanical Characteristics

- Package: SMB/DO-214AA
- Case Material : Molded Plastic. UL Flammability Classification Rating 94V-0
- Moisture Sensitivity : Meet MSL 1
- Terminals : Solder plated, solderable per MIL-STD-750, Method 2026
- RoHS Compliant.

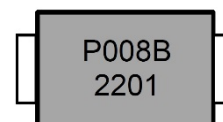
DO-214AA(SMB)



Circuit diagram



Marking Information



P008B : Device Marking Code
XXXX = Data Code

Absolute Maximum Ratings(T=25°C, RH=45%-75%, unless otherwise noted)

Parameter	Symbol	Value	Unit
Operating junction temperature range	T _J	-40 to +125	°C
Storage temperature range	T _{STG}	-65 to +150	°C
Repetitive peak pulse Voltage(10/700uS)	V _{PP}	4000	V

Electrical Characteristics (T=25°C, unless otherwise noted)									
Part Number	Marking Code	V _{DRM}	I _{DRM}	V _s @ I _s		I _H	V _T @ I _T		C _o
		V	μA	V	mA	mA	V	A	pF
			max	max	max	min	max	max	max
TSC0080SB	P008B	6	5	25	800	20	4	2.2	80
TSC0150SB	P01B	14	5	20	800	40	4	2.2	80
TSC0220SB	P02B	18	5	30	800	40	4	2.2	80
TSC0300SB	P03B	25	5	40	800	40	4	2.2	80
TSC0640SB	P06B	58	5	77	800	100	4	2.2	80
TSC0720SB	P07B	65	5	88	800	100	4	2.2	75
TSC0900SB	P09B	75	5	98	800	100	4	2.2	70
TSC1100SB	P11B	90	5	130	800	100	4	2.2	70
TSC1300SB	P13B	120	5	160	800	100	4	2.2	70
TSC1500SB	P15B	140	5	180	800	100	4	2.2	70
TSC1800SB	P18B	170	5	220	800	100	4	2.2	70
TSC2000SB	P20B	180	5	220	800	100	4	2.2	70
TSC2300SB	P23B	190	5	260	800	100	4	2.2	70
TSC2600SB	P26B	220	5	300	800	100	4	2.2	70
TSC3100SB	P31B	275	5	350	800	100	4	2.2	60
TSC3500SB	P35B	320	5	400	800	100	4	2.2	60

Notes :

1. All measurements are made at an ambient temperature of 25°C. I_{PP} applies to -40°C through +85°C temperature range.
2. Off-state capacitance (C_o) is measured at 1 MHz with a 2 V bias

Typical Characteristics

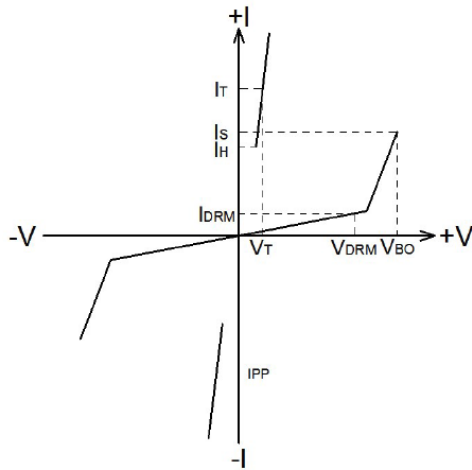


Fig 1. V-I cure characteristics

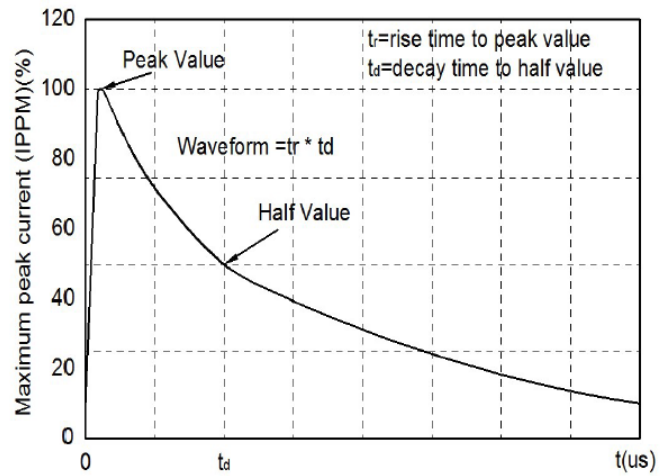


Fig 2. Pulse Waveform

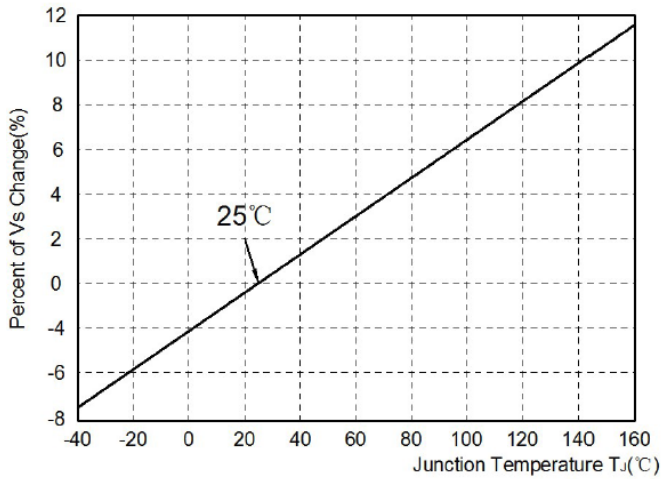


Fig 3. Normalized V_s change vs. junction temperature

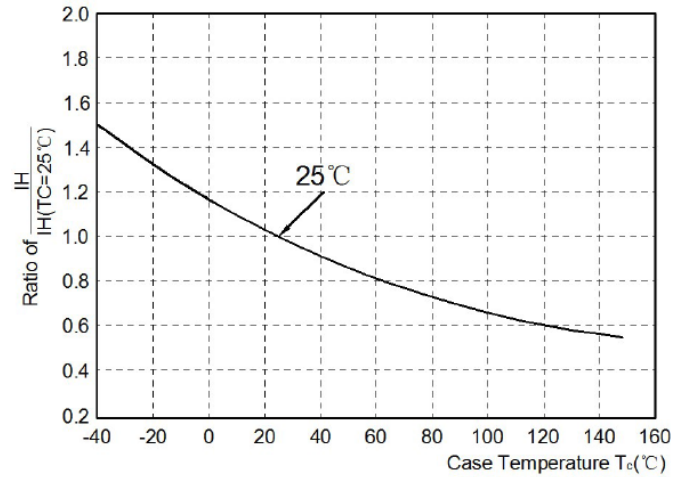
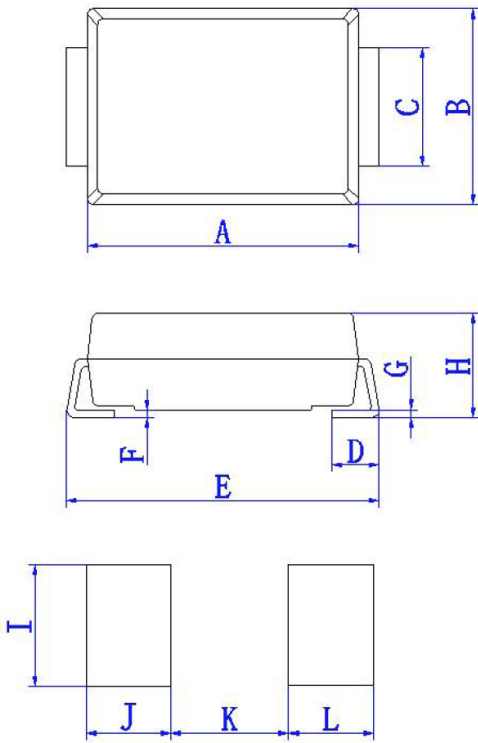


Fig 4. Normalized DC holding current vs. case temperature

Package mechanical data

Symbol	Millimeters	
	Min.	Max.
A	4.22	4.70
B	3.40	3.94
C	1.90	2.10
D	0.90	1.42
E	5.21	5.59
F	0.00	0.23
G	0.15	0.25
H	1.95	2.60
I	2.20	--
J	2.10	--
K	--	2.74
L	2.10	--



Ordering information

Part Number	Package	Base qty	Reel Size	Delivery mode
		(pcs)	(inch)	
TSCxxxxSB Series	DO-214AA(SMB)	3,000	13	Tape and reel