

### Features

Low capacitance  
Cannot be damaged by voltage  
Will not fatigue  
Eliminate voltage overshoot  
Glass passivated junction  
Halogen free and RoHS compliant

### Applications

CASE: SMBJ(DO-214AA) Molded Plastic  
UL Flammability Classification Rating 94V0  
Mounting Position:Any

### Dimensions and Pin Configuration



### Maximum Ratings & Thermal Characteristics

(Ratings at 25°C ambient temperature unless otherwise specified.)

Parameter	Symbol	Value	Units	Remarks
Peak Pulse Voltage	$V_{PP}$	4000	V	10/700us
Peak Pulse Current	$I_{PP}$	80	A	10/1000us
Peak Pulse Current	$I_{PK}$	250	A	8/20us
Peak One-cycle Surge Current	$I_{TSM}$	25	A	60Hz
Rate of Rise of Current	$di/dt$	500	A/us	
Typical Thermal Resistance Junction to Lead	$R_{\theta JL}$	20	°C/W	
Typical Thermal Resistance Junction to Ambient	$R_{\theta JA}$	100	°C/W	
Operating Temperature Range	$T_J$	-40 to 150	°C	
Storage Temperature Range	$T_{STG}$	-55 to 150	°C	



Part Number	Marking	V <sub>S</sub> @100KV/S V MAX	I <sub>S_LMT</sub> mA	V <sub>T</sub> @ I <sub>T</sub> V MAX	I <sub>T</sub> A	I <sub>D</sub> @ V <sub>D</sub> uA MAX	V <sub>D</sub> V	C <sub>O</sub> @1MHz,2V <sub>DC</sub> pF TYP	I <sub>H</sub> mA TYP
P0080SB	P008B	25	500	4	2.2	5	6	84	40
P0220SB	P02B	30	500	4	2.2	5	15	84	40
P0300SB	P03B	40	500	4	2.2	5	25	80	40
P0640SB	P06B	77	800	4	2.2	5	58	76	120
P0720SB	P07B	88	800	4	2.2	5	65	76	120
P0900SB	P09B	98	800	4	2.2	5	75	76	120
P1100SB	P11B	130	800	4	2.2	5	90	72	120
P1300SB	P13B	160	800	4	2.2	5	120	72	120
P1500SB	P15B	180	800	4	2.2	5	140	68	120
P1800SB	P18B	220	800	4	2.2	5	170	64	120
P2300SB	P23B	260	800	4	2.2	5	190	60	120
P2600SB	P26B	300	800	4	2.2	5	220	56	120
P3100SB	P31B	350	800	4	2.2	5	275	52	120
P3500SB	P35B	400	800	4	2.2	5	320	48	120
P4500SB	P45B	530	800	4	2.2	5	400	36	120

**Typical Performance Characteristics (TA=25°C unless otherwise Specified)**

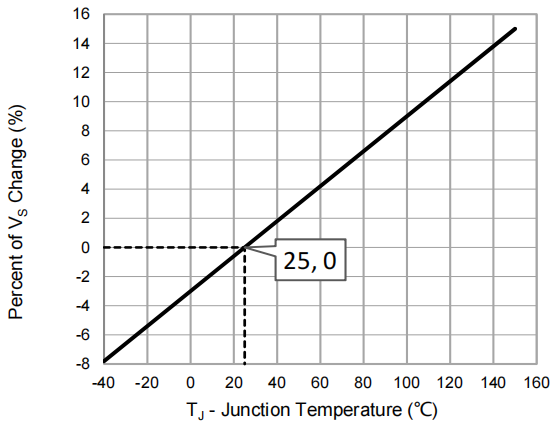


Fig.1 - Peak Pulse Current Rating

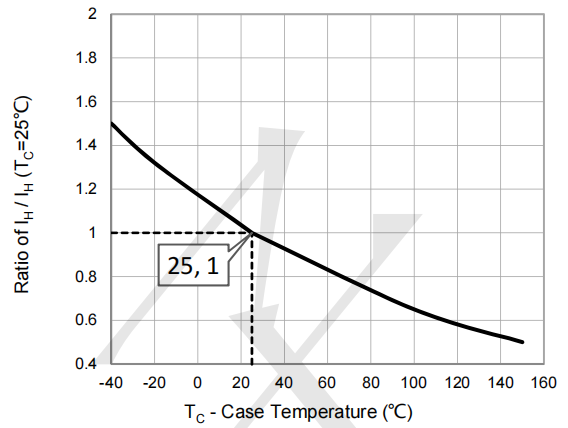


Fig.2 - Normalized DC Holding Current vs. Case Temperature

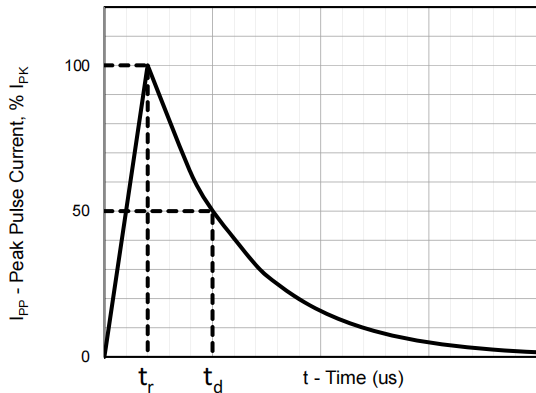


Fig.3 - tr/td us Pulse Waveform

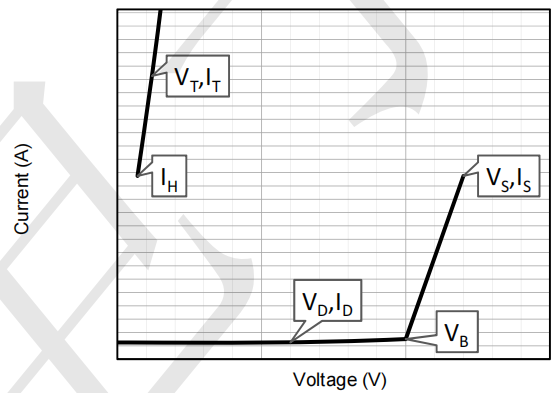


Fig.4 - VI Curve

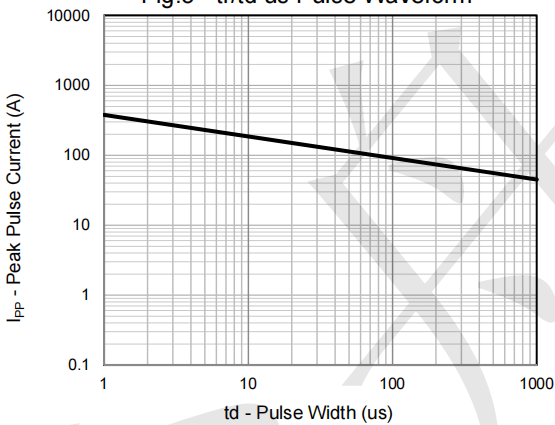


Fig.5 - Peak Pulse Current Rating

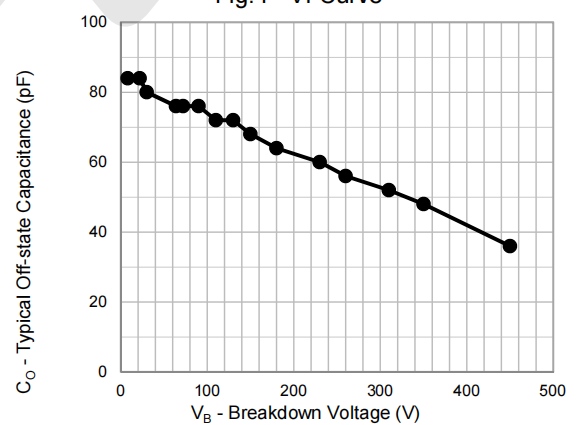


Fig.6 - Typical Off-state Capacitance

**Package Outline Dimensions: SMB(DO-214AA)**

Dim	Millimeters		Inches	
	Min	Max	Min	Max
L	4.4	4.6	0.173	0.181
D	3.5	3.7	0.138	0.146
D1	1.9	2.1	0.075	0.083
T	5.1	5.48	0.201	0.216
T1	1.0	1.6	0.039	0.063
d	-	0.2	-	0.008
H	2.2	2.45	0.087	0.096
H1	2.15	2.35	0.085	0.093

