

**SMB**


Symbol

**Features**

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

**Mechanical Data**

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

**Making Code & information**

	PxxxxB = Type Code YYWW = Date Code	<table border="1"> <thead> <tr> <th>Package</th> <th>Packing Description</th> <th>Packing Quantity</th> </tr> </thead> <tbody> <tr> <td>SMB</td> <td>Tape/Reel,13" reel</td> <td>3000</td> </tr> </tbody> </table>	Package	Packing Description	Packing Quantity	SMB	Tape/Reel,13" reel	3000
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**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	

**Electrical Characteristics**

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

Part Number	Marking	$V_S @ 100kV/S$ V MAX	$I_{S\_LMT}$ mA	$V_T @ I_T$ V MAX	$I_T$ A	$I_D @ V_D$ uA MAX	$V_D$ V	$C_O @ 1MHz, 2V_{DC}$ pF TYP	$I_H$ mA MAX
P4200SB	P42B	520	800	4	2.2	5	400	36	100

## Ratings and Characteristic Curves

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

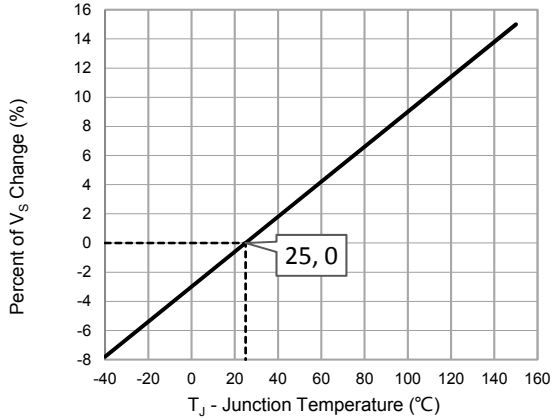


Fig.1 - Peak Pulse Current Rating

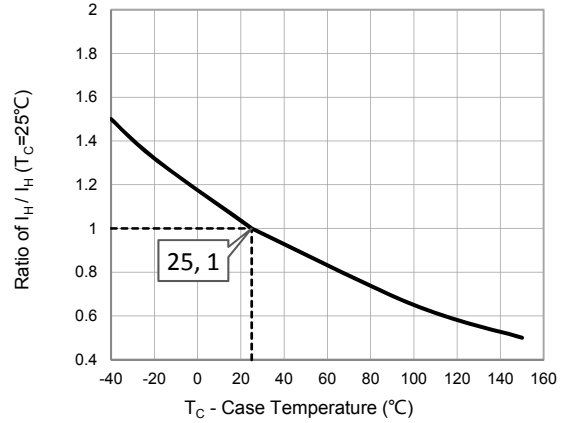


Fig.2 - Normalized DC Holding Current vs. Case Temperature

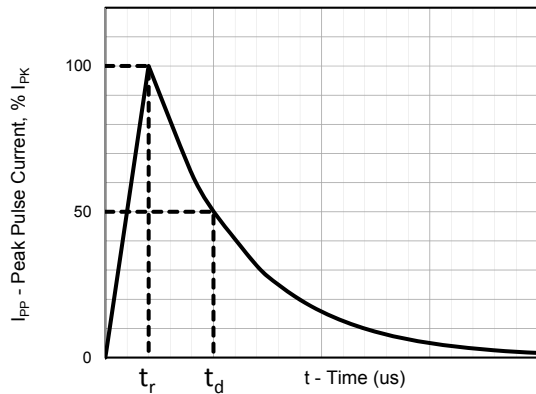


Fig.3 - tr/td us Pulse Waveform

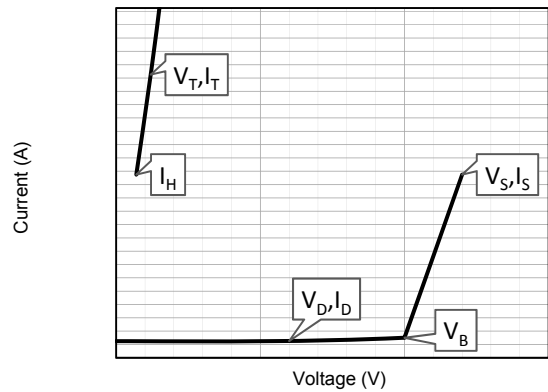


Fig.4 - VI Curve

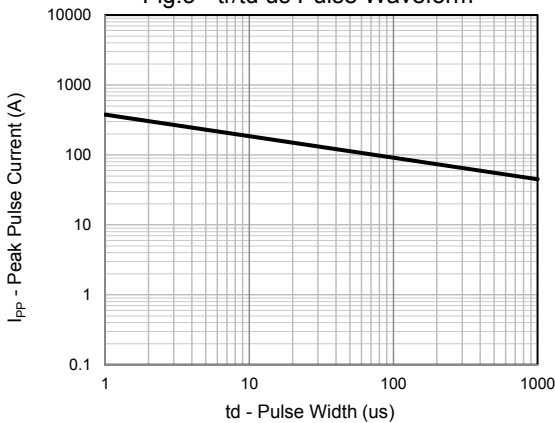


Fig.5 - Peak Pulse Current Rating

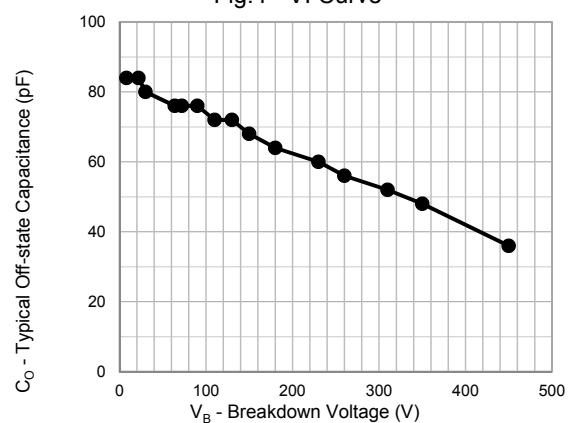


Fig.6 - Typical Off-state Capacitance

## 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