

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}	6000	V	10/700us
Peak Pulse Current	I_{PP}	100	A	10/1000us
Peak Pulse Current	I_{PK}	400	A	8/20us
Peak One-cycle Surge Current	I_{TSM}	30	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
P4200SC	P42C	520	800	4	2.2	5	400	45	100



Ratings and Characteristic Curves

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

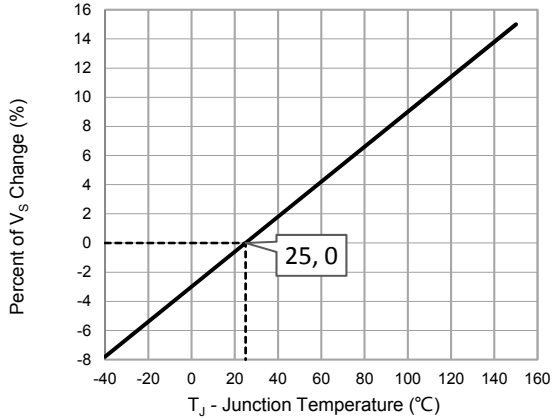


Fig.1 - Peak Pulse Current Rating

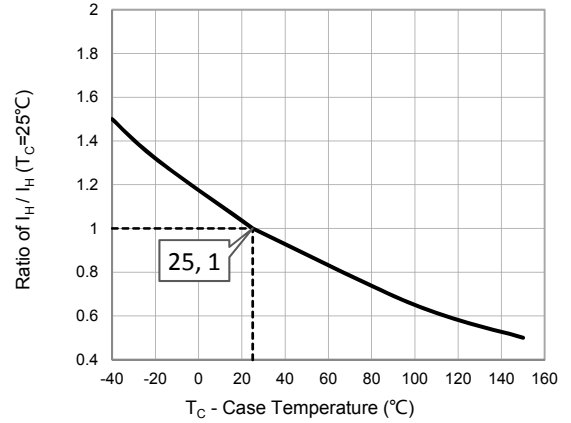


Fig.2 - Normalized DC Holding Current vs. Case Temperature

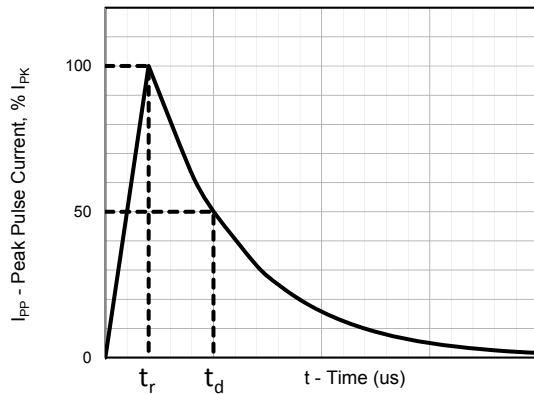


Fig.3 - tr/td us Pulse Waveform

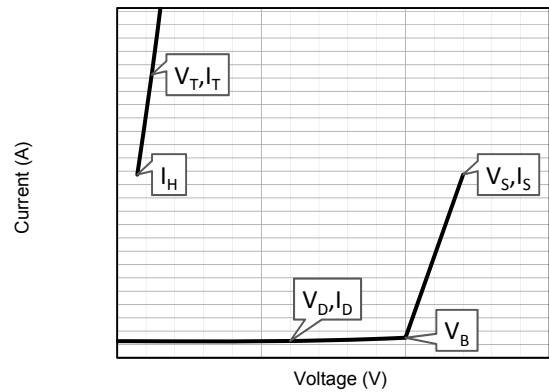


Fig.4 - VI Curve

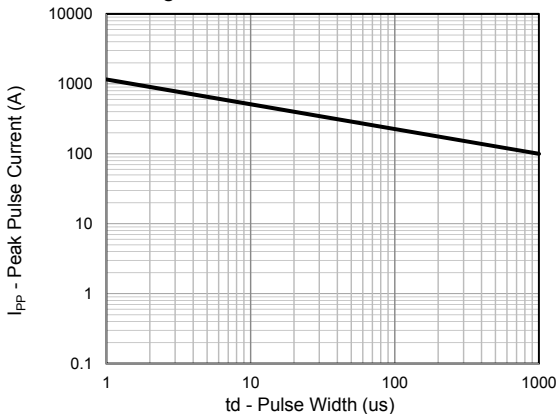


Fig.5 - Peak Pulse Current Rating

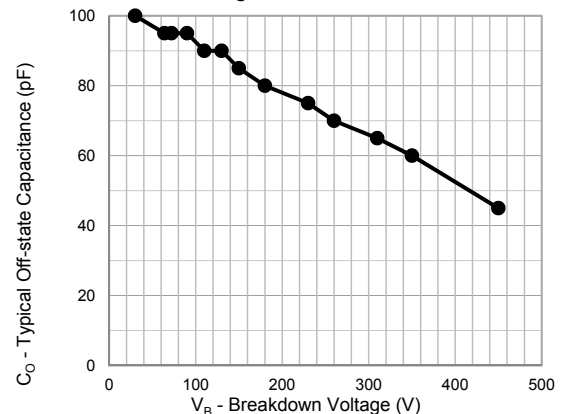
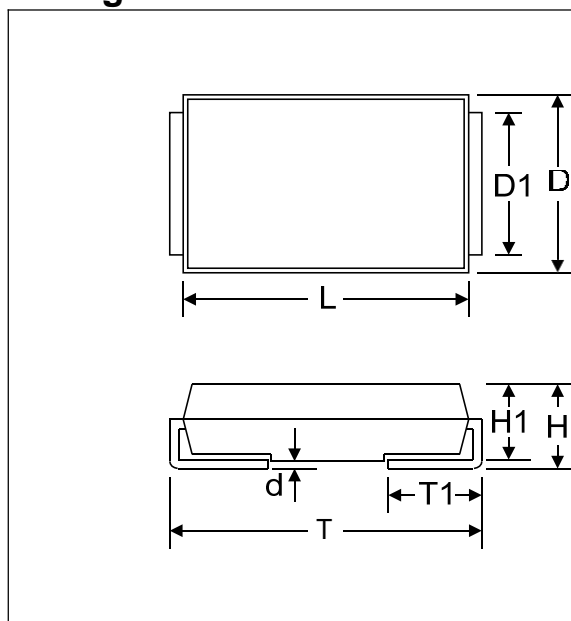


Fig.6 - Typical Off-state Capacitance

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