

### 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	$V_S @ 100KV/S$ 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 TYP
P3100SA	350	800	4	2.2	5	275	52	120

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

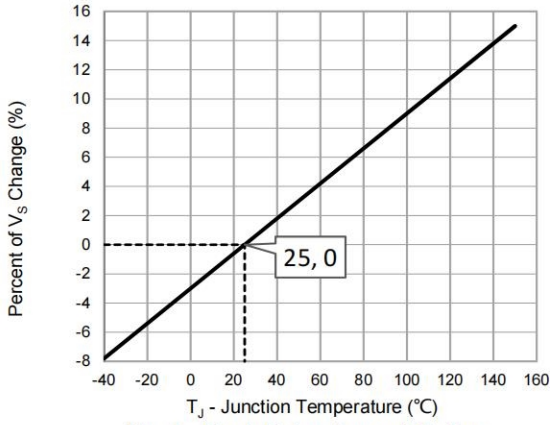


Fig. 1 - Peak Pulse Current Rating

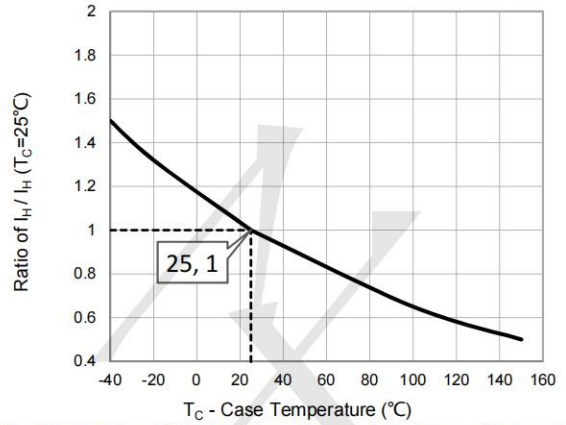


Fig. 2 - Normalized DC Holding Current vs. Case Temperature

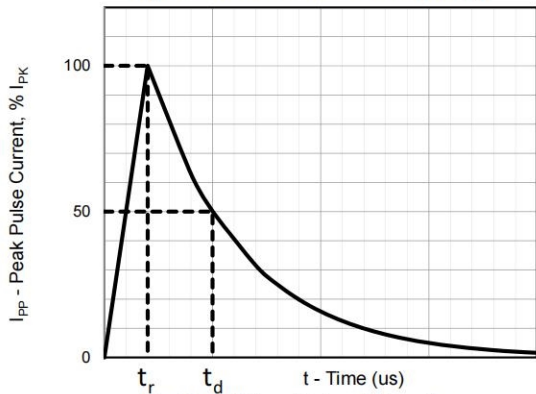


Fig. 3 - tr/td us Pulse Waveform

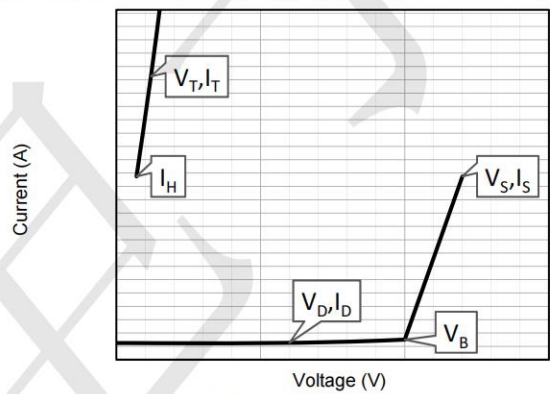


Fig. 4 - VI Curve

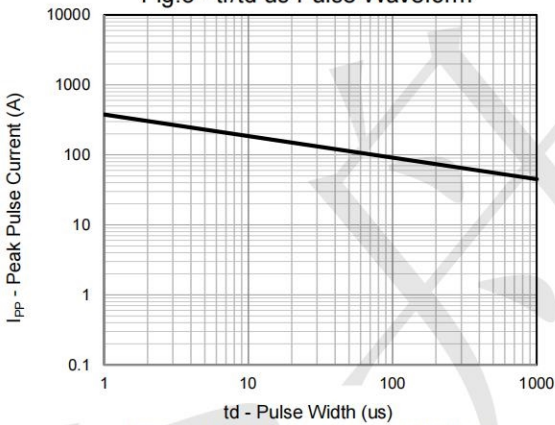


Fig. 5 - Peak Pulse Current Rating

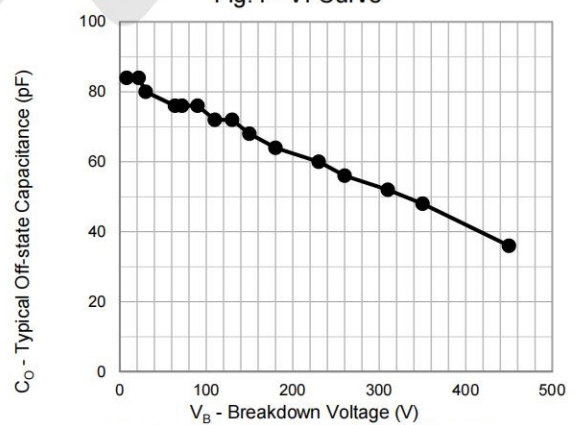


Fig. 6 - Typical Off-state Capacitance

**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

