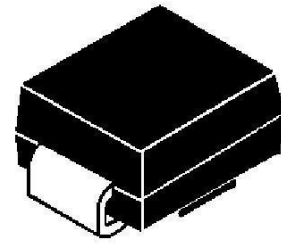


Surface Mount Schottky Barrier Rectifiers

Features

- Ideal for automated placement
- Guardring for overvoltage protection
- Low power losses, high efficiency
- Low forward voltage drop
- High surge capability
- Meets MSL level 1, per J-STD-020, LF maximum peak of 260 °C
- Solder dip 260 °C, 40 s
- Component in accordance to RoHS 2002/95/EC and WEEE 2002/96/EC



SMB (DO-214 AA)

Mechanical Date

- **Case:** DO-214AA (SMB)
Epoxy meets UL 94V-0 flammability rating
- **Terminals:** Matte tin plated leads, solderable per J-STD-002 and JESD22-B102
E3 suffix for consumer grade, meets JESD 201 class
1A whisker test, HE3 suffix for high reliability grade (AEC Q101 qualified), meets JESD 201 class 2 whisker test
- **Polarity:** Color band denotes cathode end

Major Ratings and Characteristics

$I_{F(AV)}$	2.0 A
V_{RRM}	20 V to 100 V
I_{FSM}	75 A
V_F	0.50V, 0.75V, 0.85V
$T_j \text{ max.}$	125 °C

Electrical Characteristics ($T_A = 25\text{ °C}$ unless otherwise noted)

Items	Test conditions	Symbol	SS22B~24B	SS25B~26B	SS28B~210B	UNIT
Instantaneous forward voltage	$I_F=2.0A$	V_F	0.50	0.75	0.85	V
Reverse current	$V_R=V_{DC}$	I_R	$T_j=25\text{ °C}$			mA
			$T_j=100\text{ °C}$			

Maximum Ratings & Thermal Characteristics ($T_A = 25\text{ }^\circ\text{C}$ unless otherwise noted)

Items	Symbol	SS22B	SS23B	SS24B	SS25B	SS26B	SS28B	SS29B	SS210B	UNIT
Maximum repetitive peak reverse voltage	V_{RRM}	20	30	40	50	60	80	90	100	V
Maximum RMS voltage	V_{RMS}	14	21	28	35	42	56	63	70	V
Maximum DC blocking voltage	V_{DC}	20	30	40	50	60	80	90	100	V
Maximum average forward rectified current	$I_{F(AV)}$	2								A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	75								A
Thermal resistance from junction to lead	$R_{\theta JL}$	28								$^\circ\text{C/W}$
Operating junction and storage temperature range	T_J, T_{STG}	-55 to +125								$^\circ\text{C}$

Characteristic Curves ($T_A=25\text{ }^\circ\text{C}$ unless otherwise noted)

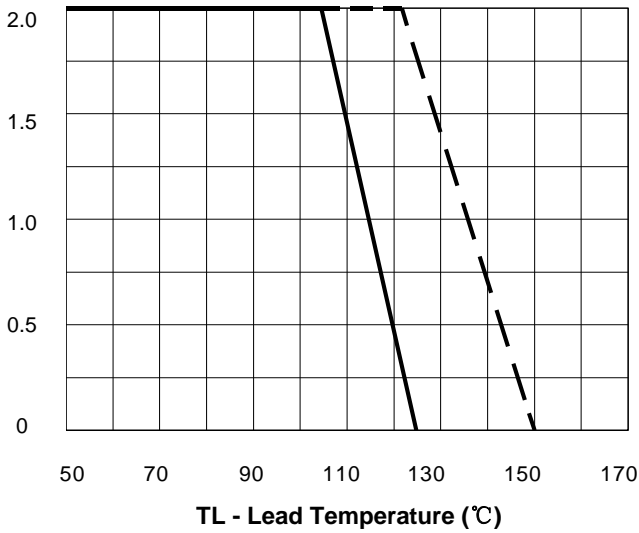


Fig 1. Forward Current Derating Curve

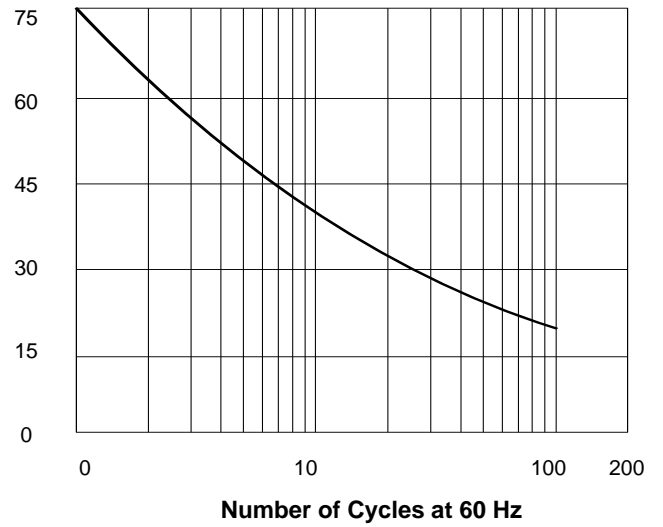


Fig 2. Maximum Non-Repetitive Peak Forward Surge Current

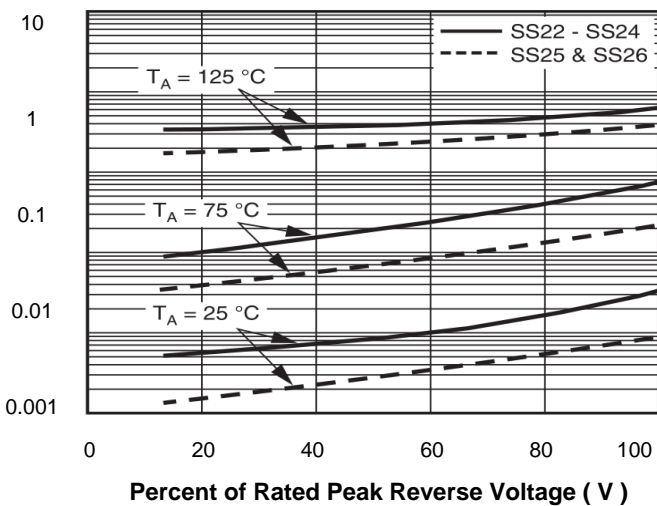


Fig3. Typical Reverse Leakage

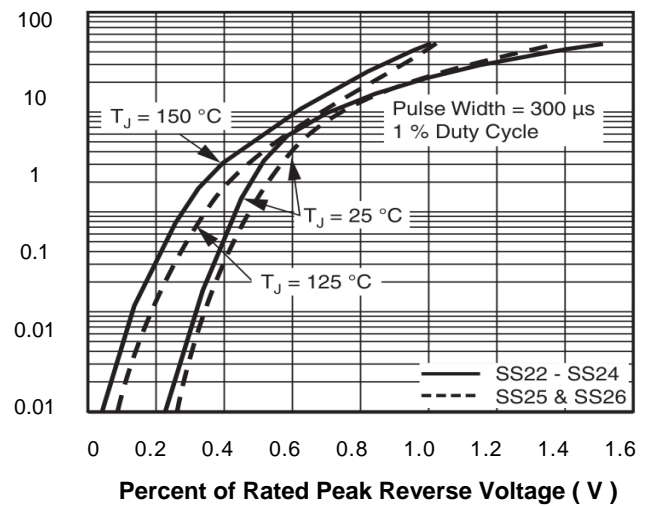


Fig4. Typical Instantaneous Forward

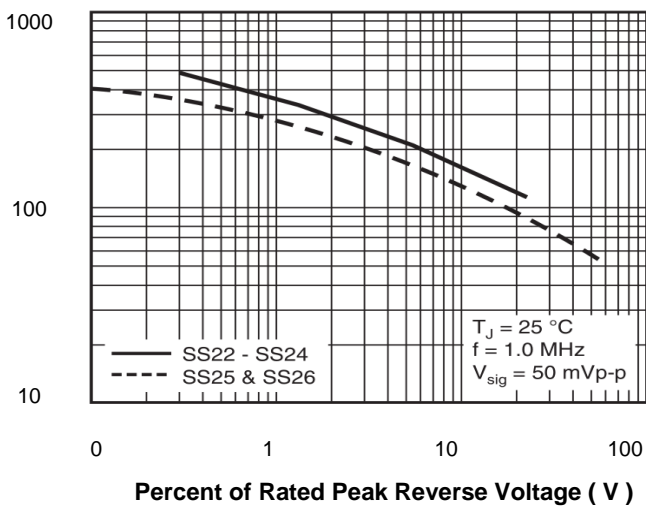
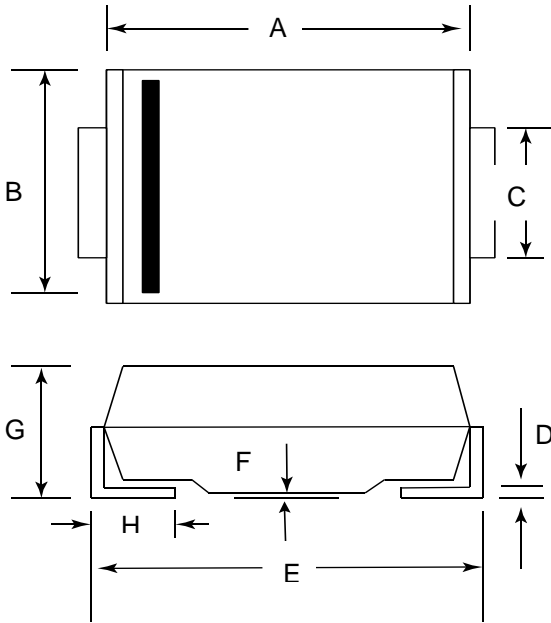


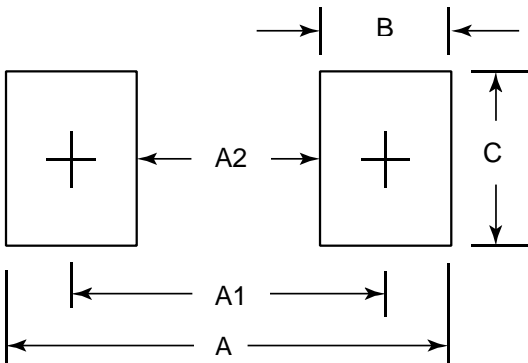
Fig3. Typical Reverse Leakage

SMB Package Dimensions



Dim	Millimeters		Inches	
	Min	Max	Min	Max
A	4.06	4.57	0.160	0.180
B	3.30	3.94	0.130	0.155
C	1.78	2.20	0.070	0.086
D	0.13	0.31	0.006	0.012
E	5.08	5.59	0.200	0.220
F	----	0.20	----	0.008
G	1.95	2.62	0.077	0.103
H	0.76	1.52	0.030	0.060

Suggested Land Pattern



DIM	Millimeters
A	6.58
A1	4.42
A2	2.26
B	2.16
C	2.75