

Schottky rectifier

Features

- Low profile package
- Ideal for automated placement
- Ultrafast reverse recovery time
- Low power losses, high efficiency
- Low forward voltage drop
- High surge capability
- High temperature soldering:
260°C/10 seconds at terminals
- Component in accordance to
RoHS 2002/95/1 and WEEE 2002/96/EC



SMA (DO-214AC)

Mechanical Data

- **Case:** JEDEC DO-214AC molded plastic
- **Terminals:** Solder plated, solderable per
J-STD-002B and JESD22-B102D
- **Polarity:** Laser band denotes cathode end

Major Ratings and Characteristics

$I_{F(AV)}$	3.0A
V_{RRM}	20 V to 200 V
I_{FSM}	100A
V_F	0.50V, 0.55V, 0.70V, 0.85V, 0.95V
$T_j \text{ max.}$	125 °C

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

Items	Symbol	SS32A	SS33A	SS34A	SS35A	SS36A	SS38A	SS310A	SS315A	SS320A	UNIT
Maximum repetitive peak reverse voltage	V_{RRM}	20	30	40	50	60	80	100	150	200	V
Maximum RMS voltage	V_{RMS}	14	21	28	35	42	56	70	105	140	V
Maximum DC blocking voltage	V_{DC}	20	30	40	50	60	80	100	150	200	V
Maximum average forward rectified current	$I_{F(AV)}$	3									A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	100									A
Voltage rate of change (rated VR)	dv/dt	10000									V/ μ s
Thermal resistance from junction to lead	$R_{\theta JL}$	35									°C/W
Operating junction and storage temperature range	T_J, T_{STG}	-65 to +125									°C

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

Items	Test conditions	Symbol	SS32A	SS33A- SS34A	SS35A- SS36A	SS38A- SS310A	SS315A- SS320A	UNIT	
Instantaneous forward voltage	$I_F=3.0A$	V_F	0.50	0.55	0.70	0.85	0.95	V	
Reverse current	$V_R=V_{DC}$	I_R	$T_J=25\text{ °C}$				0.5		mA
			$T_J=100\text{ °C}$				5.0		

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

Fig.1 Forward Current Derating Curve

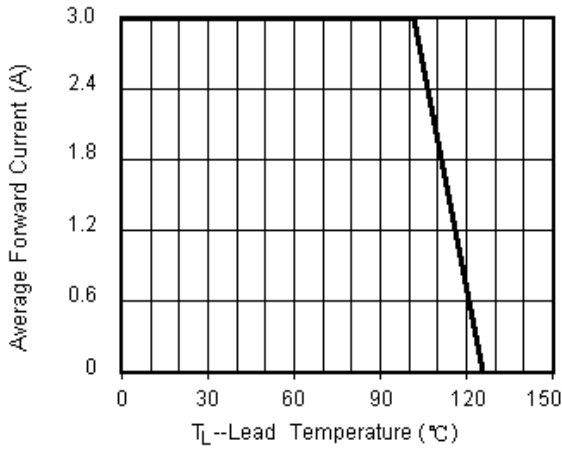


Fig.2 Maximum Non-Repetitive Peak Forward Surge Current

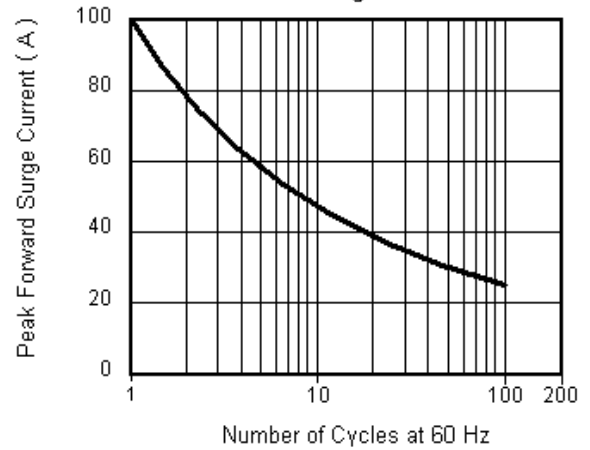


Fig.3 Typical Instantaneous Forward Characteristics

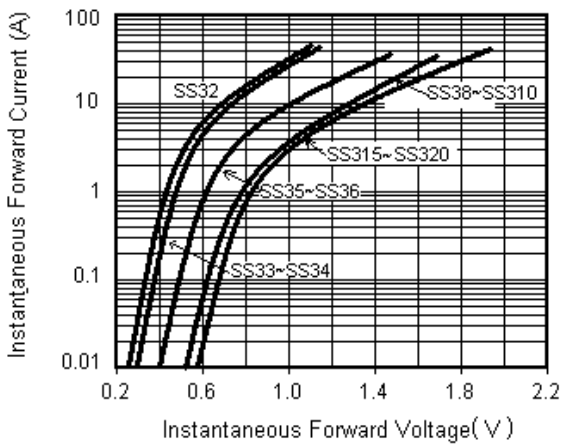
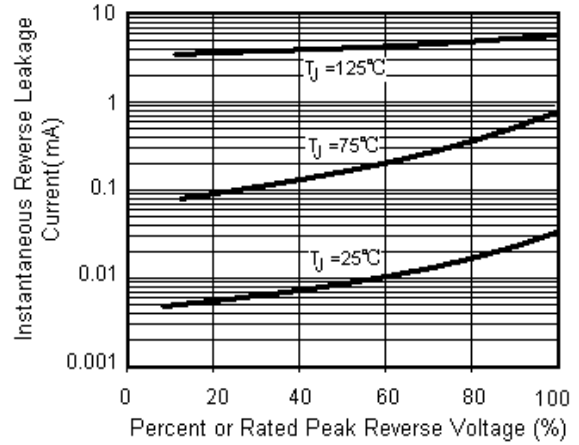
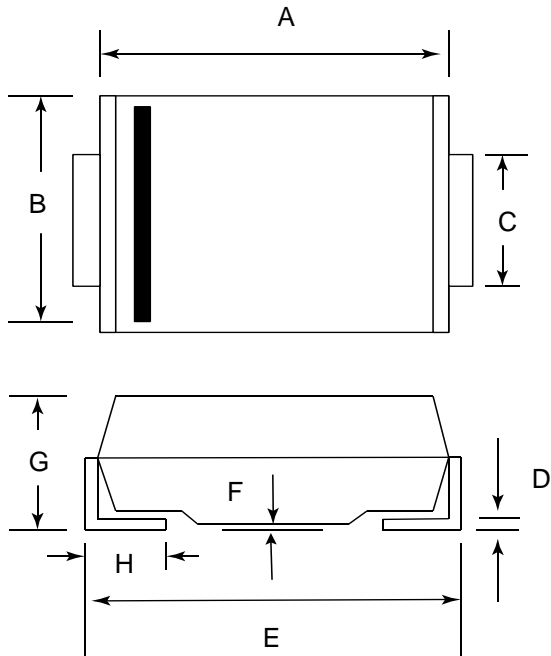


Fig.4 Typical Reverse Leakage Characteristics



Package Outline Dimensions and Pad Layouts



Dim	Millimeters		Inches	
	Min	Max	Min	Max
A	3.99	4.50	0.157	0.177
B	2.54	2.79	0.100	0.110
C	1.25	1.65	0.049	0.065
D	0.152	0.305	0.006	0.012
E	4.93	5.28	0.194	0.208
F	----	0.203	----	0.008
G	1.98	2.29	0.078	0.090
H	0.76	1.52	0.030	0.060