

SuperSchottky – 3A, 20~100V Schottky barrier rectifiers



1. Features

- Plastic package has Underwriters Laboratory
- Flammability Classification 94V-0
- For surface mounted applications
- Metal silicon junction, majority carrier conduction
- Low power loss, high efficiency
- High current capability, low forward voltage drop

2. Mechanical Data

- Case: SMA (DO-214AC) molded plastic body
- Terminals: leads solderable per MIL-STD-750, Method 2026
- Polarity: color band denotes cathode end

3. Marking and Circuit

Marking	Circuit
	

4. Specification

Absolute Maximum Rating & Electrical Characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

Single phase half-wave 60Hz, resistive or inductive load.

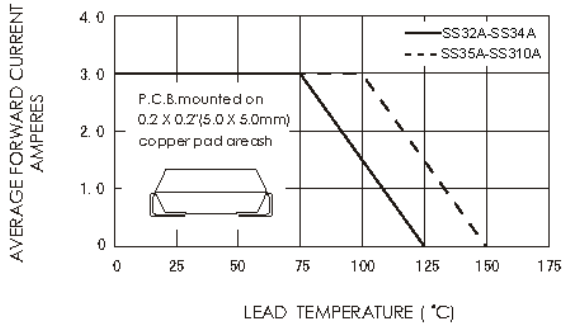
Parameters	Symbol	SS32A	SS33A	SS34A	SS35A	SS36A	SS38A	SS310A	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	20	30	40	50	60	80	100	V
Maximum RMS voltage	V_{RMS}	14	21	28	35	42	56	70	V
Maximum DC blocking voltage	V_{DC}	20	30	40	50	60	80	100	V
Average Rectified Output Current	$I_{F(AV)}$	3							A
Non-Repetitive Peak Forward Surge Current: 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	100							A
Maximum Instantaneous Forward Voltage at 3 A	V_F	0.55		0.70		0.85			V
Maximum DC reverse current at rated DC blocking voltage	$T_J=25\text{ }^\circ\text{C}$	0.5							mA
	$T_J=100\text{ }^\circ\text{C}$	20							
Typical thermal resistance (1)	$R_{\theta JA}$	55							$^\circ\text{C/W}$
	$R_{\theta JL}$	17							
Operating junction temperature range	T_J	-55 TO +125							$^\circ\text{C}$
Storage temperature range	T_{STG}	-55 TO +150							$^\circ\text{C}$

Note:

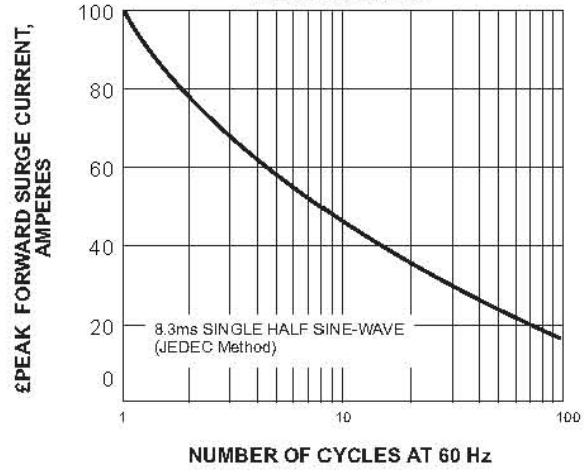
1. P.C.B. mounted with 0.55 X 0.55 " (14 X 14 mm) copper pad areas

5. Typical Characteristic

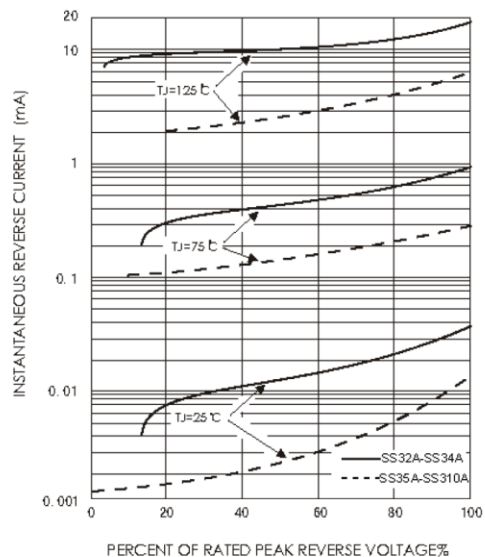
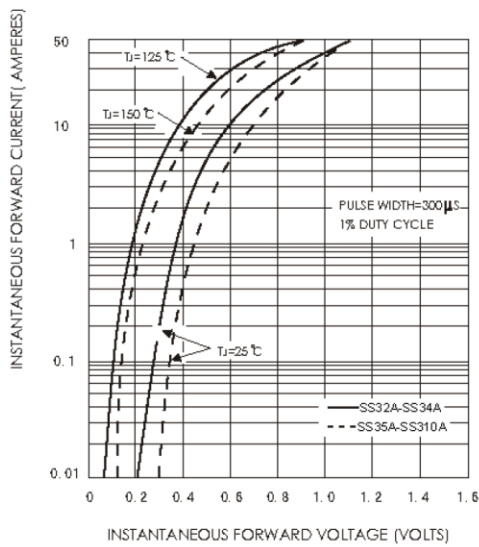
FORWARD CURRENT DERATING CURVE



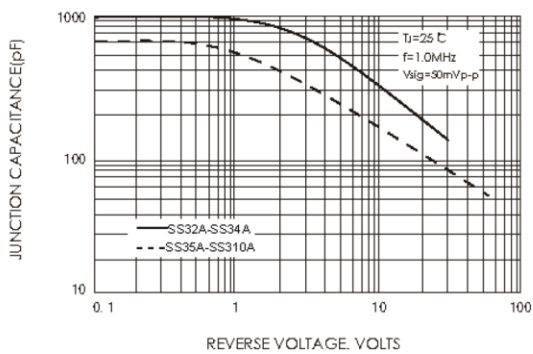
MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT



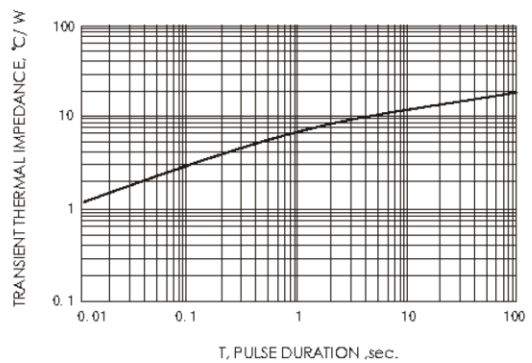
TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

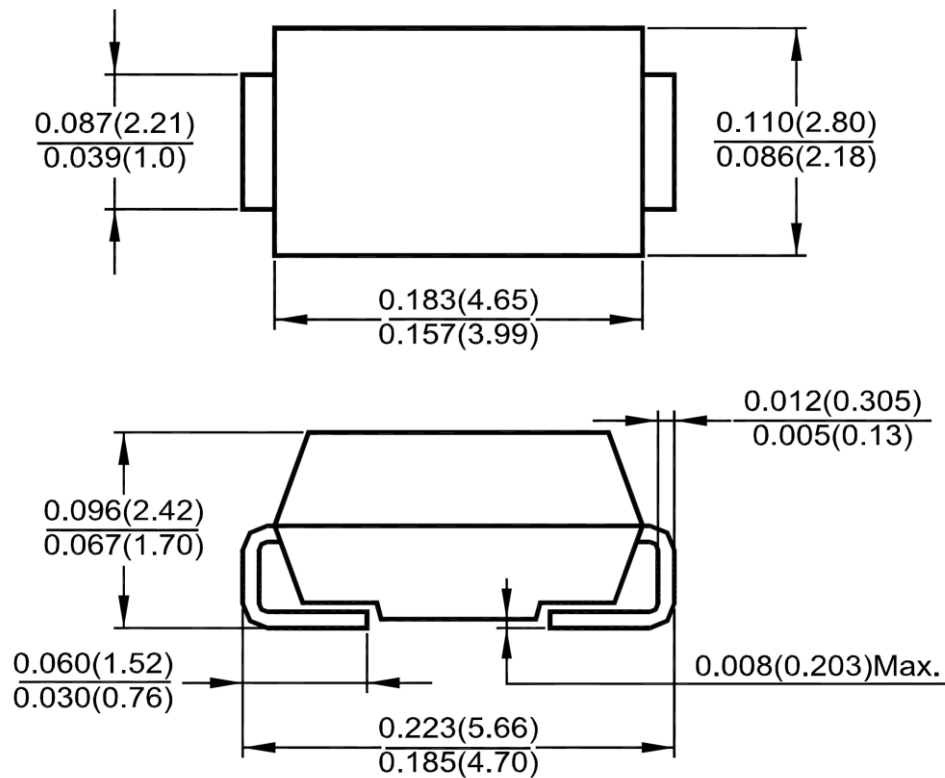


TYPICAL JUNCTION CAPACITANCE



TYPICAL TRANSIENT THERMAL IMPEDANCE



6. Dimension**SMA (DO-214AC)**

Dimensions in inches and (millimeters)

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