



# SS32B THRU SS3DB

## Surface Mount Schottky Barrier Rectifier

### Features

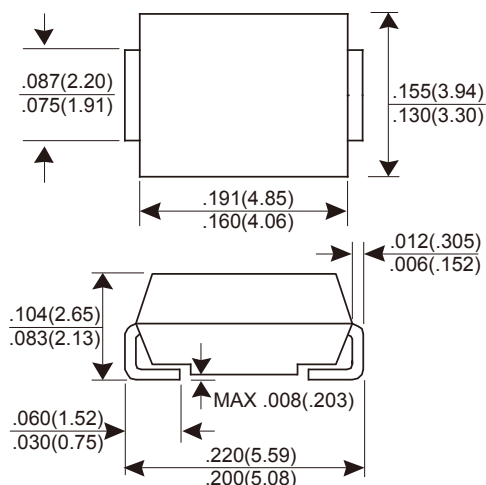
- ★ Low profile package
- ★ Ideal for automated placement
- ★ Guardring for overvoltage protection
- ★ Low power losses, high efficiency
- ★ Low forward voltage drop
- ★ High surge current capability

### Mechanical Data

- ★ Case: Molded plastic, SMB/DO-214AA
- ★ Epoxy: UL 94V-0 rate flame retardant
- ★ Terminals: Solderable per MIL-STD-750, method 2026
- ★ Polarity: Color band denotes cathode end
- ★ Mounting position: Any

**Voltage Range 20 to 200V**  
**Current 3.0 Ampere**

### SMB/DO-214AA



Dimensions in inches and (millimeters)

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

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

For capacitive load, derate current by 20%.

PARAMETER	SYMBOL	SS32B	SS33B	SS34B	SS35B	SS36B	SS38B	SS3BB	SS3CB	SS3DB	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	$I_{F(AV)}$	3.0									A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	$I_{FSM}$	80									A
Maximum instantaneous forward voltage @ $I_F=3.0A$	$V_F$	0.55		0.75		0.85		0.95		V	
Maximum DC reverse current at rated DC blocking voltage @ $T_A=25^\circ C$ / @ $T_A=100^\circ C$	$I_R$					0.5 / 10					mA
Typical thermal resistance (Note 1)	$R_{\theta JA}$					55					$^\circ C/W$
	$R_{\theta JL}$					17					$^\circ C/W$
Operating junction temperature range	$T_J$	-55 to +125			-55 to +150					$^\circ C$	
Storage temperature range	$T_{STG}$	-55 to +150									$^\circ C$

NOTE : (1) PCB mounted with 0.3" x 0.3" (8.0 mm x 8.0 mm) copper pad areas

# RATINGS AND CHARACTERISTICS CURVES SS32B THRU SS3DB

Fig.1 - Forward Current Derating Curve

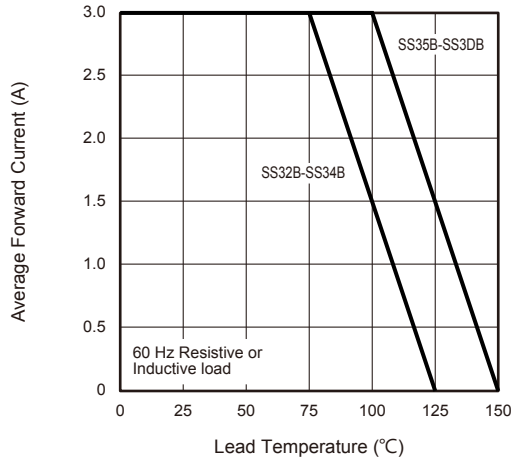


Fig.2 - Maximum Non-Repetitive Peak Forward Surge Current

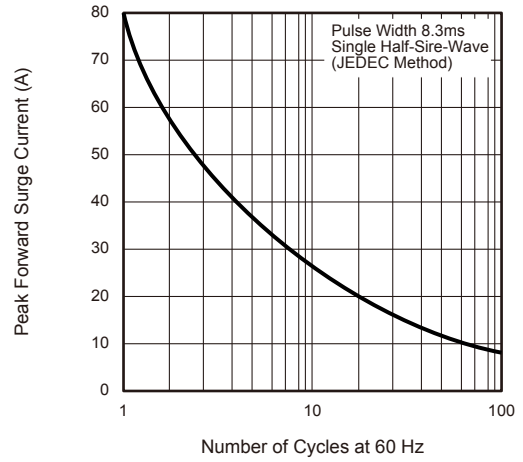


Fig.3 - Typical Instantaneous Forward Characteristics

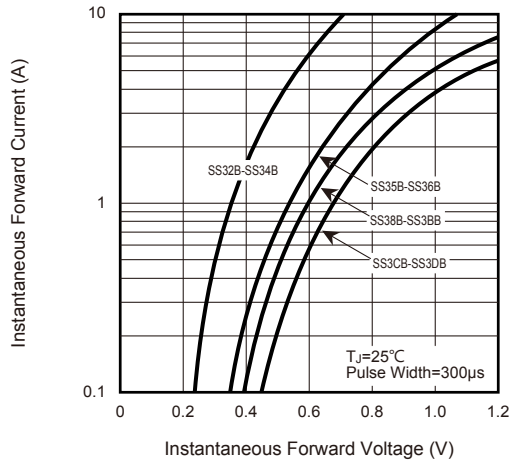


Fig.4 - Typical Reverse Leakage Characteristics

