

## SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

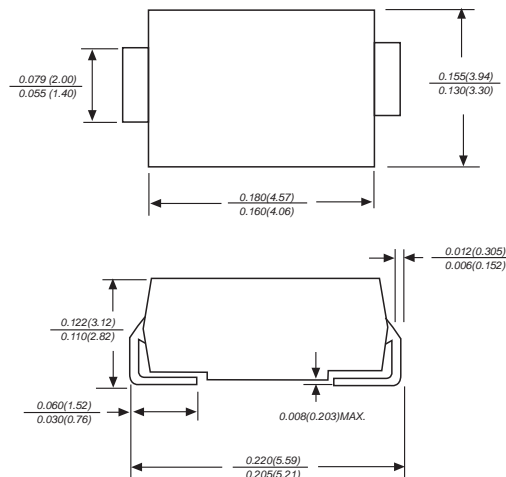
# SS32 THRU SS3200

**VOLTAGE RANGE**      20 to 200 Volts  
**CURRENT**                      3.0 Ampere

### FEATURES

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- For surface mounted applications
- Low reverse leakage
- Built-in strain relief, ideal for automated placement
- High forward surge current capability
- High temperature soldering guaranteed: 250°C/10 seconds at terminals

### DO-214AA



*Dimensions in inches and (millimeters)*

### MECHANICAL DATA

- Case : JEDEC DO-214AA molded plastic body
- Terminals : leads solderable per MIL-STD-750, Method 2026
- Polarity : Color band denotes cathode end
- Mounting Position : Any
- Weight : 0.005 ounce, 0.138 grams

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

- Ratings at 25°C ambient temperature unless otherwise specified.
- Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

	SYMBOLS	SS32	SS33	SS34	SS35	SS36	SS38	SS310	SS3150	SS3200	UNITS	
Maximum repetitive peak reverse voltage	$V_{RRM}$	20	30	40	50	60	80	100	150	200	VOLTS	
Maximum RMS voltage	$V_{RMS}$	14	21	28	35	42	56	70	105	150	VOLTS	
Maximum DC blocking voltage	$V_{DC}$	20	30	40	50	60	80	100	150	200	VOLTS	
Maximum average forward rectified current at $T_L$ (see fig. 1)	$I_{(AV)}$	3.0									Amps	
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	100.0									Amps	
Maximum instantaneous forward voltage at 3.0A	$V_F$	0.55			0.70		0.85		0.95		Volts	
Maximum DC reverse current at rated DC blocking voltage	$I_R$	0.5						0.2		mA		
$T_A=25^\circ\text{C}$ $T_A=100^\circ\text{C}$		20			10		2.0					
Typical junction capacitance (NOTE 1)	$C_J$	500			300						pF	
Typical thermal resistance (NOTE 2)	$R_{\theta JA}$	55.0									$^\circ\text{C/W}$	
Operating junction temperature range	$T_J$	-65 to +125						-65 to +150				$^\circ\text{C}$
Storage temperature range	$T_{STG}$	-65 to +150									$^\circ\text{C}$	

**Note:** 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.  
2. P.C.B. mounted with 0.2x0.2" (5.0x5.0mm) copper pad areas

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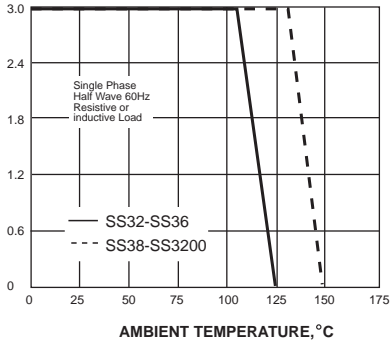
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VOLTAGE RANGE  
CURRENT

20 to 200 Volts  
3.0 Ampere

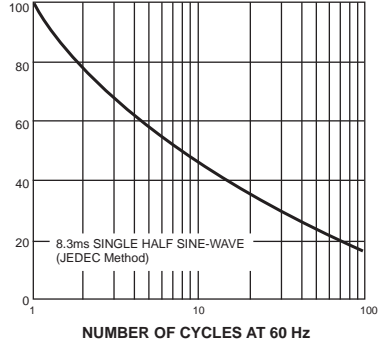
AVERAGE FORWARD RECTIFIED CURRENT,  
AMPERES

FIG. 1- FORWARD CURRENT DERATING CURVE



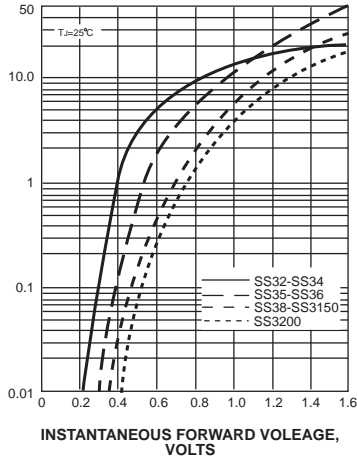
PEAK FORWARD SURGE CURRENT,  
AMPERES

FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT



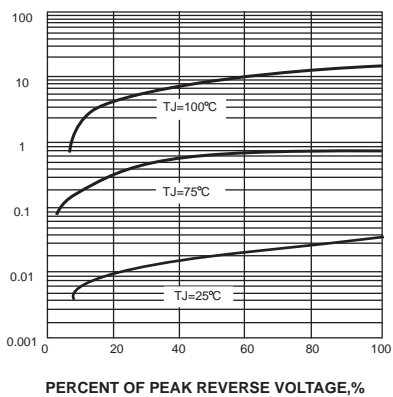
INSTANTANEOUS FORWARD CURRENT, AMPERES

FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



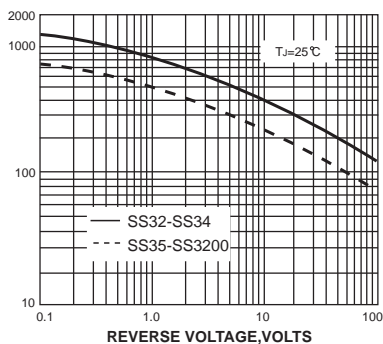
INSTANTANEOUS REVERSE CURRENT,  
MILLIAMPERES

FIG. 4-TYPICAL REVERSE CHARACTERISTICS



JUNCTION CAPACITANCE, pF

FIG. 5-TYPICAL JUNCTION CAPACITANCE



TRANSIENT THERMAL IMPEDANCE,  
°C/W

FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE

