



# SS32A THRU SS310A

## SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

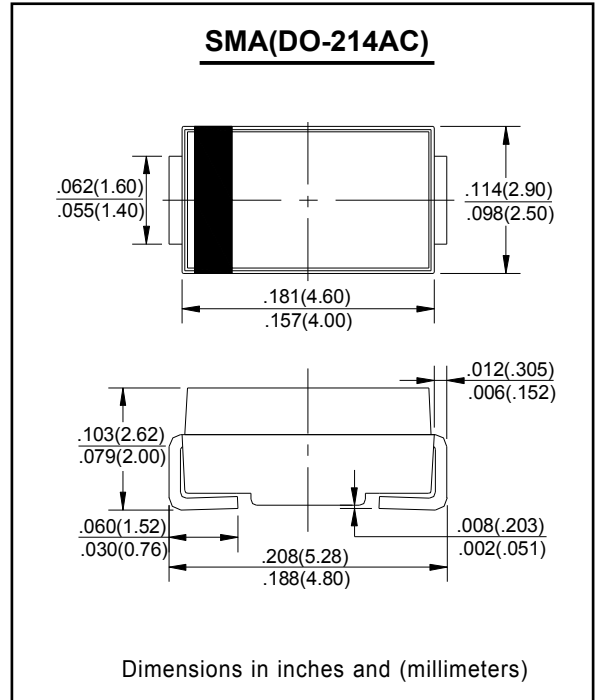
Reverse Voltage - 20 to 100 Volts    Forward Current - 3.0 Ampere

### FEATURES

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- For surface mounted applications
- Metal silicon junction, majority carrier conduction
- 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

### MECHANICAL DATA

**Case:** JEDEC DO-214AC molded plastic body  
**Terminals:** Solder plated, solderable per MIL-STD-750, Method 2026  
**Polarity:** Color band denotes cathode end  
**Mounting Position:** Any  
**Weight:** 0.003 ounce, 0.093 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%.

Characteristic	SYMBOLS	SS32A	SS33A	SS34A	SS35A	SS36A	SS38A	SS310A	UNITS
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
Maximum average forward rectified current at $T_L$ (see fig.1)	$I_{(AV)}$	3.0							A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	100.0							A
Maximum instantaneous forward voltage at 3.0A	$V_F$	0.55		0.70		0.85		V	
Maximum DC reverse current at rated DC blocking voltage	$I_R$	0.5							mA
$T_A=25^\circ\text{C}$ $T_A=100^\circ\text{C}$		20			10				
Typical junction capacitance (NOTE 1)	$C_J$	220			180				pF
Typical thermal resistance (NOTE 2)	$R_{\theta JA}$	75.0							°C/W
Operating junction temperature range	$T_J$	-65 to +125			-65 to +150				°C
Storage temperature range	$T_{STG}$	-65 to +150							°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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## RATINGS AND CHARACTERISTIC CURVES

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

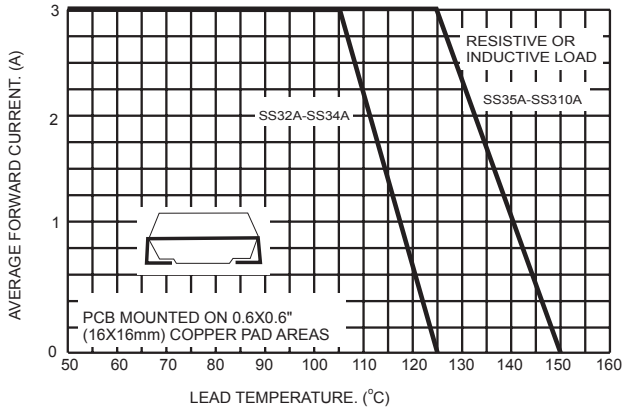


FIG.2- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

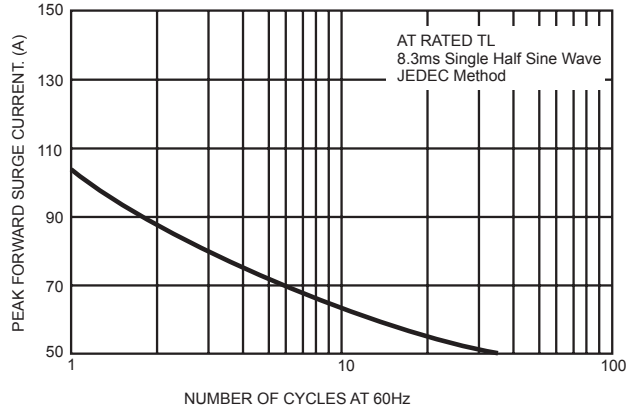


FIG.3- TYPICAL FORWARD CHARACTERISTICS

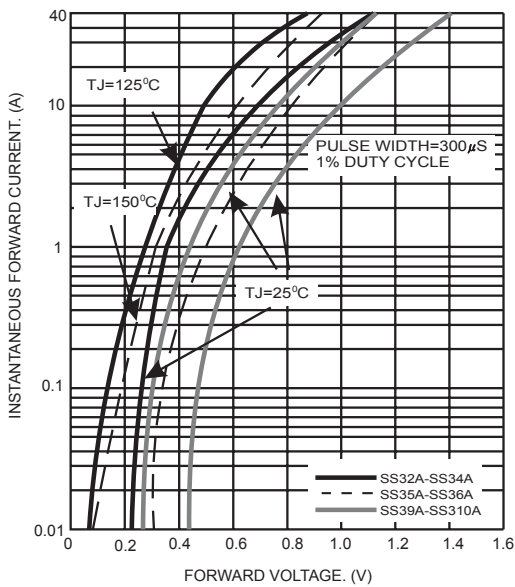


FIG.4- TYPICAL REVERSE CHARACTERISTICS

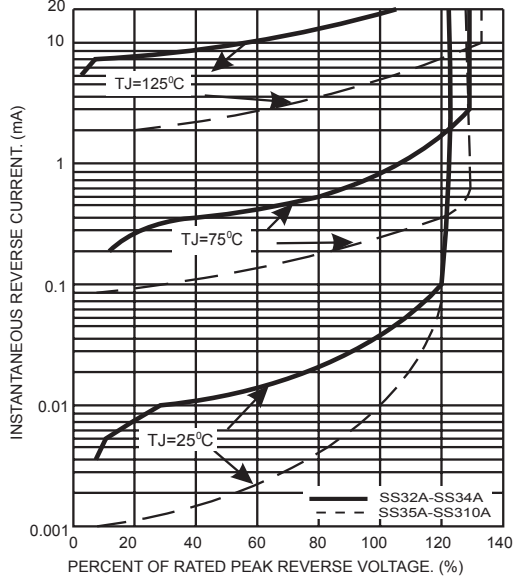


FIG.5- TYPICAL JUNCTION CAPACITANCE

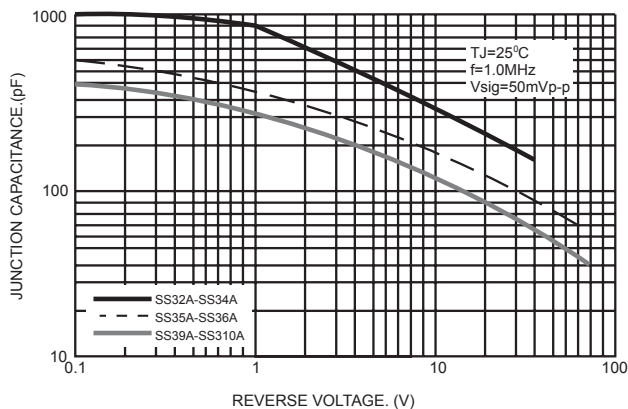


FIG.6- TYPICAL TRANSIENT THERMAL IMPEDANCE

