

# SS32 THRU SS3A

## SCHOTTKY BARRIER RECTIFIERS

Reverse Voltage – 20 to 100 Volts

Forward Current – 3.0 Amperes

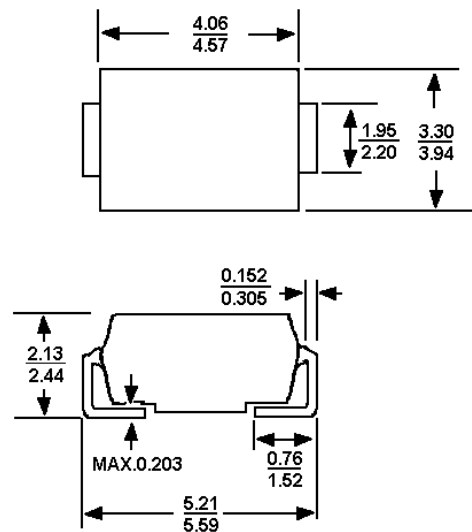
### Features

- Plastic package has Underwriters Laboratories Flammability Classification 94V-0
- Metal silicon junction, majority carrier conduction
- For surface mount applications
- Low power loss, high efficiency
- High current capability, Low forward voltage drop.
- Low profile package
- Built-in strain relief, ideal for automated placement
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications
- High temperature soldering guaranteed: 250/10sec at terminals

### Mechanical Data

- **Case:** JEDEC DO-214AA, molded plastic body
- **Terminals:** Solder plated, solderable per MIL-STD-750, Method 2026
- **Polarity:** Color band denotes cathode end

SMB/DO214AA



Dimensions in mm

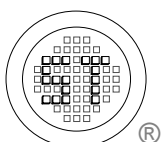
### Absolute Maximum Ratings and Characteristics

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

	Symbols	SS32	SS33	SS34	SS35	SS36	SS38	SS3A	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	57	71	V
Maximum DC blocking voltage	$V_{DC}$	20	30	40	50	60	80	100	V
Maximum average forward rectified current at 0.375"(9.5mm) lead length	$I_{F(AV)}$	3.0							A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	80							A
Maximum Instantaneous forward voltage at 3.0A (Note 1)	$V_F$	0.50		0.75		0.85		V	
Maximum instantaneous reverse Current at rated DC blocking at voltage (Note 1)	$I_R$	1.5							mA
		20		10					
Typical junction capacitance	$C_{tot}$	250			160				pF
Typical thermal resistance (Note 2)	$R_{\theta JA}$	55.0							°C/W
	$R_{\theta JA}$	17.0							
Operating junction temperature range	$T_J$	-65 to +125			-65 to +150				°C
Storage temperature range	$T_S$	-65 to +150							°C

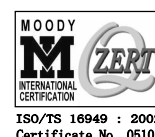
Notes: 1. Pulse test: 300µs pulse width, 1% duty cycle

2. P.C.B. mounted 0.55X0.55"(14X14mm) copper pad areas



**SEMTECH ELECTRONICS LTD.**

(Subsidiary of Semtech International Holdings Limited, a company listed on the Hong Kong Stock Exchange, Stock Code: 724)



ISO/TS 16949 : 2002  
Certificate No. 05103



ISO 14001  
Certificate No. 7116



ISO 9001 : 2000  
Certificate No. 0361004000

# SS32 THRU SS3A

FIG. 1-FORWARD CURRENT DERATING CURVE

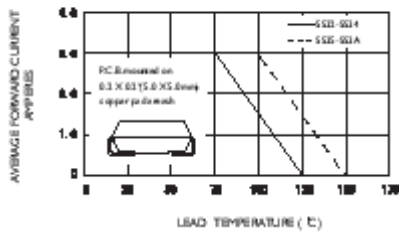


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

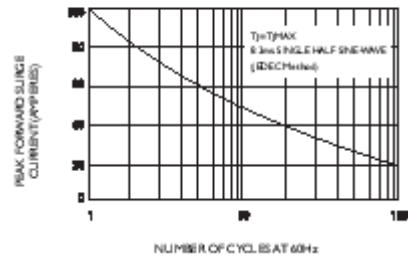


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

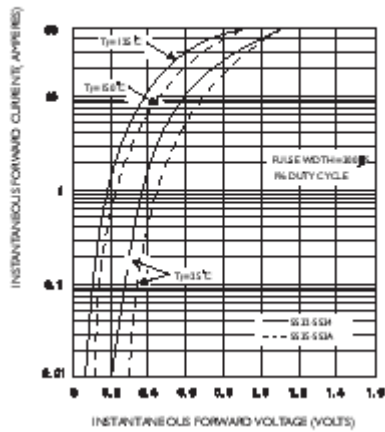


FIG.4-TYPICAL REVERSE CHARACTERISTICS

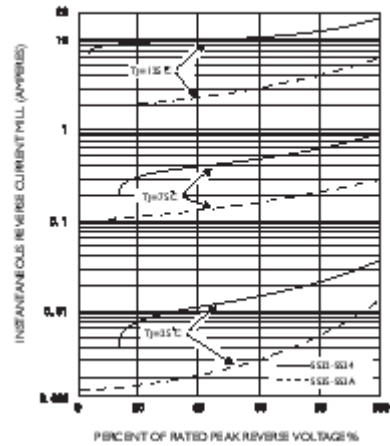


FIG.5-TYPICAL JUNCTION CAPACITANCE

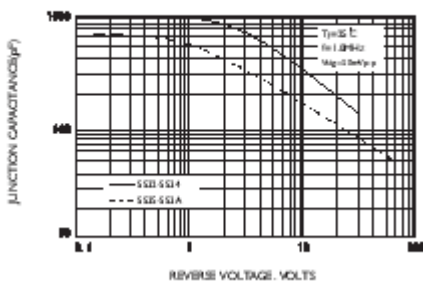
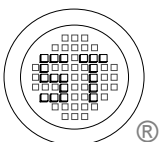
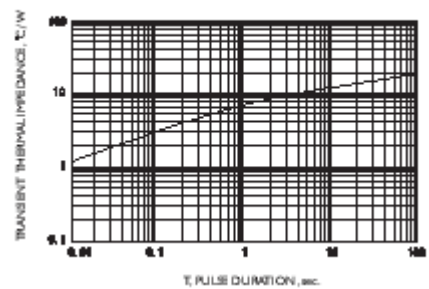


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE



**SEMTECH ELECTRONICS LTD.**  
 (Subsidiary of Semtech International Holdings Limited, a company listed on the Hong Kong Stock Exchange, Stock Code: 724)

