

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER SS32 THRU SS3B 20 to 100 V 3.0A

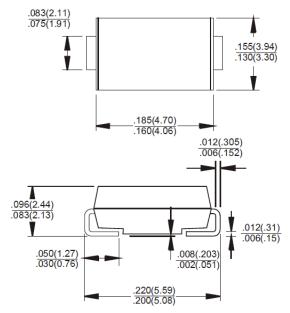
Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Metal silicon junction, majority carrier conduction
- For surface mount applications
- Guard ring for over voltage protection
- Low power loss, high efficiency
- High current capability, Low forward voltage drop
- High surge capability
- For use in low voltage, high frequency inverters, free wheeling ,and polarity protection applications
- High temperature soldering guaranteed: 250°C/10 seconds at terminals

Mechanical Data

- Case: JEDEC SMB(DO-214AA) molded plastic body
- Terminals: solder plated ,solder able per MIL-STD-750,method 2026
- Polarity: color band denotes cathode end
- Weight: 0.003ounce,0.093 gram

SMB/DO-214AA



Dimensions in inches and (millimeters)

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, derate current by 20%.

	Symbols	SS 32	SS 33	SS 34	SS 35	SS 36	SS 38	SS 3A	SS 3A5	SS 3B	
	Marking	SK 32	SK 33	SK 34	SK 35	SK 36	SK 38	SK 310	SK 315	SK 320	Units
Maximum Recurrent 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	140	Volts
Maximum DC Blocking Voltage	V_{DC}	20	30	40	50	60	80	100	150	200	Volts
Maximum average forward rectified current 0.375"(9.5mm) lead length(See Fig. 1)	I _(AV)	3.0									Amp
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	I _{FSM}	80.0									Amp
Maximum instantaneous forward voltage at 2.0A(Note 1)	V_{F}	0.55		0.	75	5 0.85		0.90	0.95	Volts	
Maximum Reverse Current T _A =25 °C at Rated DC Blocking Voltage	I _R	0.2									mAmp
T _A =100°C		20 10							iii iiip		
Typical junction capacitance(Note 3)	CJ	250			160						pF
Typical Thermal Resistance (Note 2)	R⊕ JA R⊕ JA	55.0 17.0							°C/W		
Operating Temperature Range	TJ	-65 to +125			-65 to +150						$^{\circ}$
Storage Temperature Range	T _{STG}	-65 to +150									$^{\circ}\mathbb{C}$

NOTES:

- 1. Pulse test: 300 μ s pulse width, 1% duty cycle
- 2. P.C.B. mounted 0.55 X 0.55"(14 X 14mm) copper pad areas
- 3.Measured at 1MHZ and reverse voltage of 4.0V



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RATINGS AND CHARACTERISTIC CURVES

FIG.1-FORWARD CURRENT DERATING CURVE

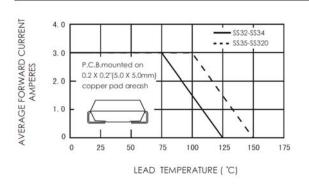


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

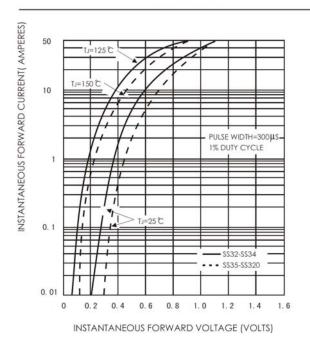


FIG.5-TYPICAL JUNCTION CAPACITANCE

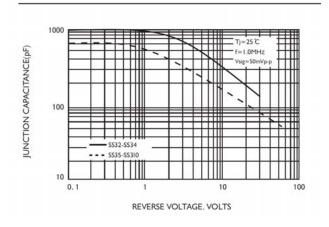


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

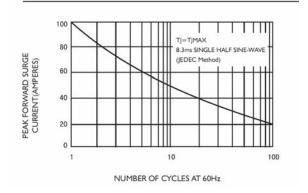
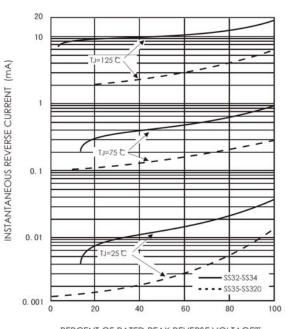
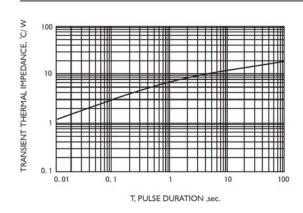


FIG.4-TYPICAL REVERSE CHARACTERISTICS



PERCENT OF RATED PEAK REVERSE VOLTAGE%

FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE



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