



SS32 THRU SS3100

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

Reverse Voltage - 20 to 100 Volts

Forward Current - 3.0Amperes

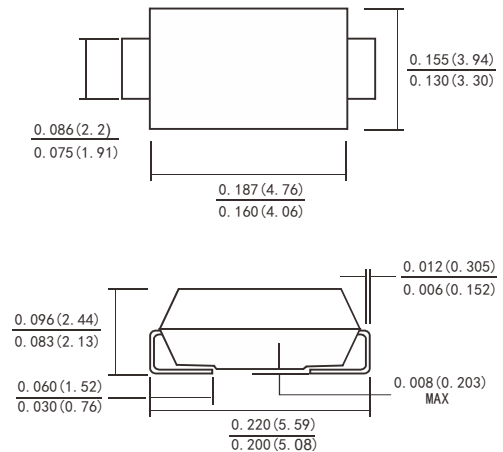
FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Metal silicon junction ,majority carrier conduction
- Built-in strain relief
- For surface mounted applications
- Low profile package
- 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:260 C/10 seconds at terminals
- Component in accordance to RoHS 2002/95/EC and WEEE 2002/96/EC

MECHANICAL DATA

- **Case:** JEDEC SMB(DO-214AA) molded plastic body
- **Terminals:** solder plated ,solderable 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 ,resistive or inductive load. For capacitive load,derate by 20%.)

		V _{RRM}	SS 32	SS 33	SS 34	SS 35	SS 36	SS 38	SS 3100	Volts
Maximum repetitive peak reverse voltage		V _{RRM}	20	30	40	50	60	80	100	Volts
Maximum RMS voltage		V _{RMS}	14	21	28	35	42	56	70	Volts
Maximum DC blocking voltage		V _{DC}	20	30	40	50	60	80	100	Volts
Maximum average forward rectified current (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}	80.0							Amps
Maximum instantaneous forward voltage at 2.0 A(note 1)		V _F	0.55			0.75		0.85		Volts
Maximum instantaneous reverse current at rated DC blocking voltage(Note 1)	T _a =25°C	I _R	0.2							mA
	T _a =100°C		20.0			10.0				
Typical thermal resistance (Note 2)		R _{JA} R _{JL}	55.0 17.0							°C/W
Operating junction temperature range		T _J	-65 to+125			-65 to+150				°C
Storage temperature range		T _{STG}	-65 to+150							°C

- Notes:**
- 1.Pulse test: 300 μs pulse width,1% duty cycle
 2. P.C.B. mounted with 0.55 X 0.55"(14.0 X 14.0mm)copper pad areas
 3. Measured at 1MHz and reverse voltage of 4.0volts

Rating and Characteristic Curves (TA = 25°C Unless otherwise noted)

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FIG.1-FORWARD CURRENT DERATING CURVE

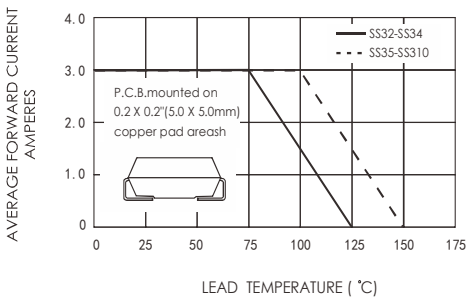


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

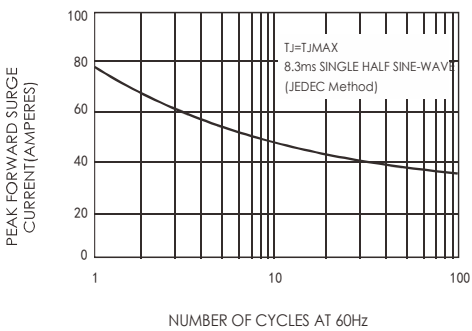


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

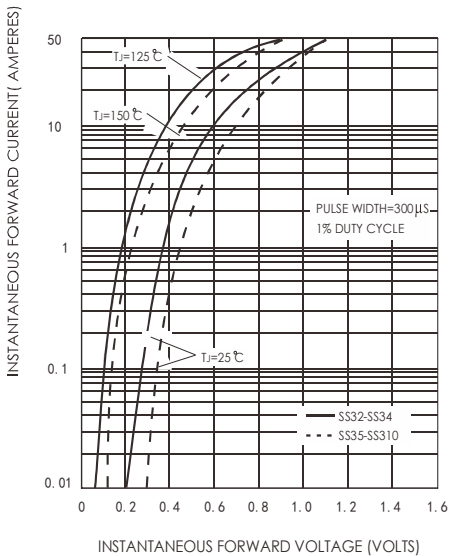


FIG.4-TYPICAL REVERSE CHARACTERISTICS

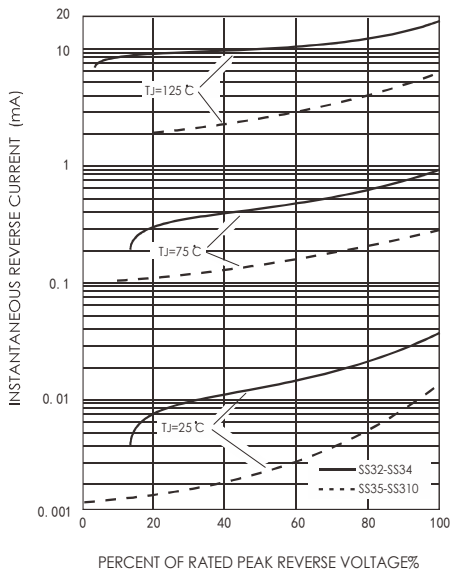


FIG.5-TYPICAL JUNCTION CAPACITANCE

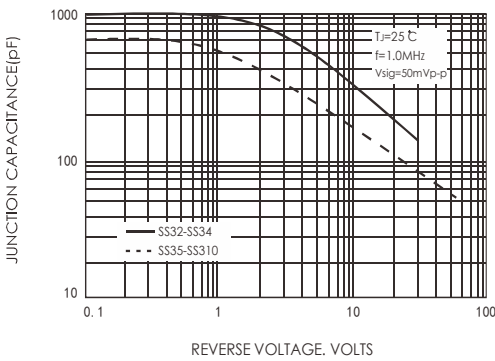


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE

