

SS32L THRU SS310L

SCHOTTKY BARRIER RECTIFIER

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

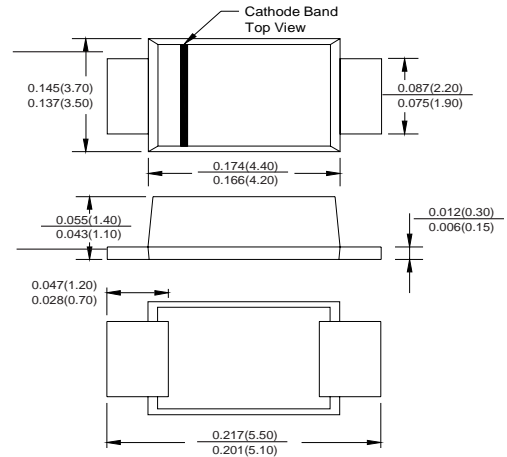
FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Metal silicon junction ,majority carrier conduction
- 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:260°C/10 seconds at terminals
- Component in accordance to RoHS 2002/95/EC and WEEE 2002/96/EC

MECHANICAL DATA

- Case : S M B F
- Terminals : Solderable per MIL-STD-750, Method 2026
- Approx. Weight : 27mg (0.00086oz)

SMBF



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%.)

	Symbols	SS 32L	SS 33L	SS 34L	SS 35L	SS 36L	SS 38L	SS 310L	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	57	71	Volts
Maximum DC blocking voltage	V _{DC}	20	30	40	50	60	80	100	Volts
Maximum average forward rectified current 0.375"(9.5mm) lead length (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 3.0 A(Note 1)	V _F	0.45		0.52		0.6		Volts	
Maximum instantaneous reverse current at rated DC blocking voltage(Note 1)	T _a = 25°C	0.2							mA
	T _a = 100°C	20			10				
Typical junction capacitance(Note 3)	C _J	250			160				PF
Typical thermal resistance (Note 2)	R _{θJA}	55.0							°C/W
	R _{θJL}	17.0							
Operating junction temperature range	T _J	-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 0.55 X 0.55"(14 X 14mm)copper pad areas

3. Measured at 1MHz and reverse voltage of 4.0volts

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RATINGS AND CHARACTERISTIC CURVES

FIG.1-FORWARD CURRENT DERATING CURVE

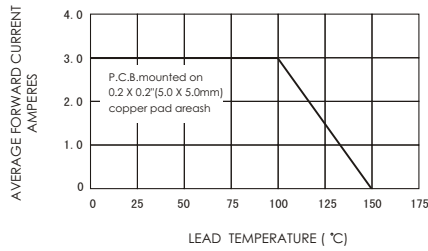


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

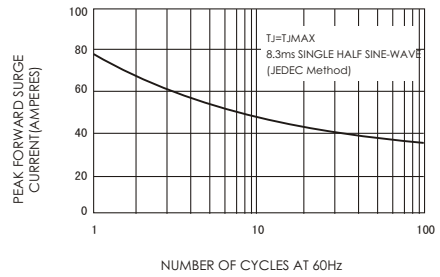


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

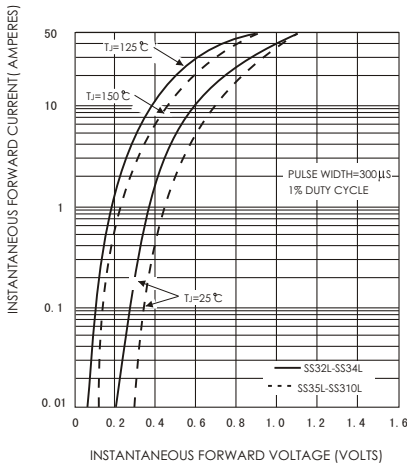


FIG.4-TYPICAL REVERSE CHARACTERISTICS

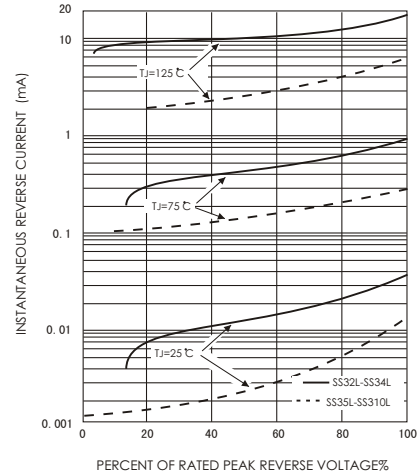


FIG.5-TYPICAL JUNCTION CAPACITANCE

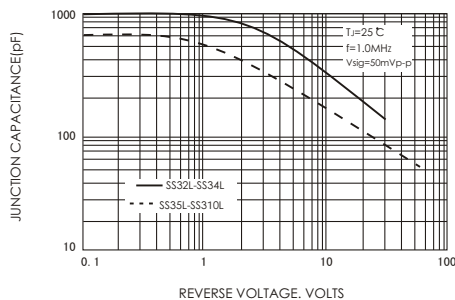


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE

