



DATA SHEET

SEMICONDUCTOR

S32 THRU S310

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER



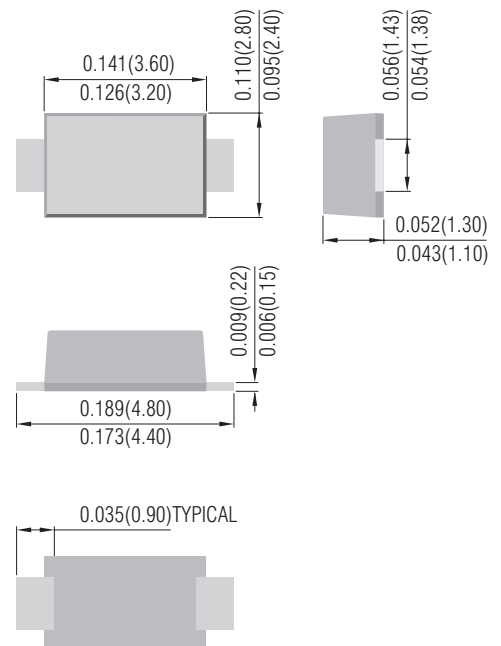
VOLTAGE- 20 to 100 Volts CURRENT- 3.0 Amperes

FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O
- For surface mounted applications
- Low profile package
- Built-in strain relief
- Metal to silicon rectifier. majority carrier conduction
- Low power loss,high efficiency
- High surge capacity
- For use in low voltage high frequency inverters, free wheeling, and polarity protection applications
- High temperature soldering guaranteed: 260°C /10 seconds at terminals
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- Pb free product at available : 99% Sn above meet RoHS environment substance directive request

SMF

Unit:inch(mm)



MECHANICAL DATA

- Case: SMF molded plastic
- Terminals:Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes positive end (cathode)
- Standard packaging: 12mm tape (EIA-481)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.
Resistive or inductive load.

	SYMBOLS	S32	S33	S34	S35	S36	S38	S39	S310	UNITS
Marking Code		S32	S33	S34	S35	S36	S38	S39	S310	
Maximum Recurrent Peak Reverse Voltage	VRRM	20.0	30.0	40.0	50.0	60.0	80.0	90.0	100.0	V
Maximum RMS Voltage	VRMS	14.0	21.0	28.0	35.0	42.0	56.0	63.0	70.0	V
Maximum DC Blocking Voltage	VDC	20.0	30.0	40.0	50.0	60.0	80.0	90.0	100.0	V
Maximum Average Forward Rectified Current at TL (See figure 1)	I(AV)	3.0								A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	IFSM	80.0								A
Maximum Instantaneous Forward Voltage at 3.0A (Note 1)	VF	0.50		0.70		0.85			V	
Maximum DC Reverse Current (Note 1) Ta= 25°C	I R	0.5								mA
at Rated DC Blocking Voltage Ta=100°C		20.0								mA
Maximum Thermal Resistance(Note 2)	RθJL RθJA	17.0 55.0								°C/W
Operating Temperature Range	TJ	-55 to +150								
Storage Temperature Range	TSTG	-55 to +150								

NOTES:

- A.Pulse Test with PW =300µsec, 2% Duty Cycle.
- B.Mounted on P.C. Board with 14mm2 (.013mm thick) copper pad areas.

DEVICE CHARACTERISTICS

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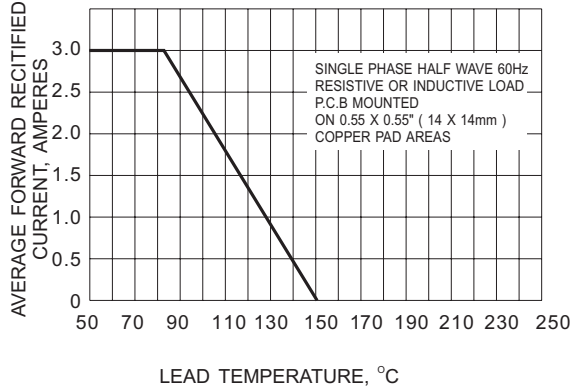


Fig.1- FORWARD CURRENT DERATING CURVE

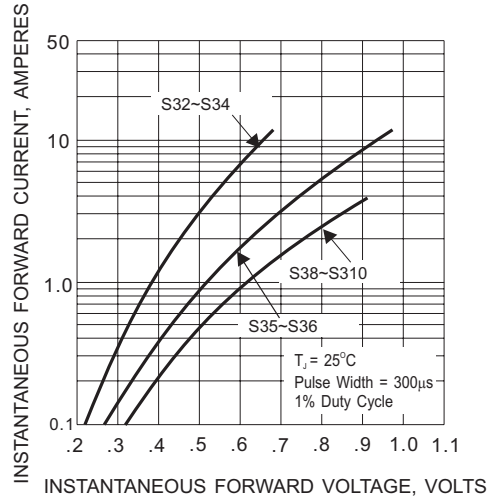


Fig.2- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

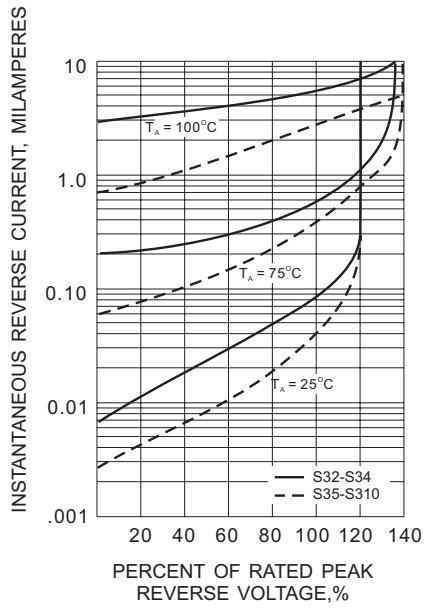


Fig.3- TYPICAL REVERSE CHARACTERISTIC

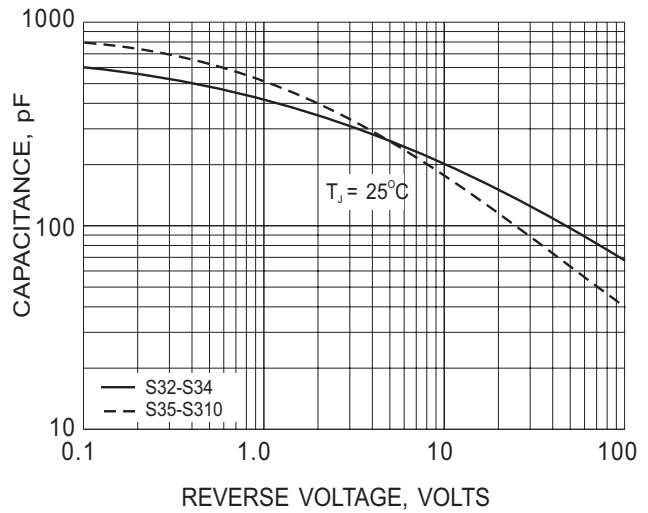


Fig.4- TYPICAL JUNCTION CAPACITANCE

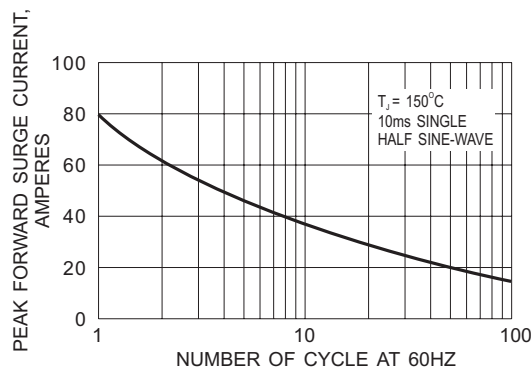


Fig.5- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT