

SX32 thru SX39

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

VOLTAGE 20 to 90 Volts **CURRENT** 3.0 Amperes

FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- 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
- Pb free product are available : 99% Sn above can meet RoHS environment substance directive request

MECHANICAL DATA

Case: JEDEC DO-214AC molded plastic

Terminals: Solder plated, solderable per MIL-STD-750, Method 2026

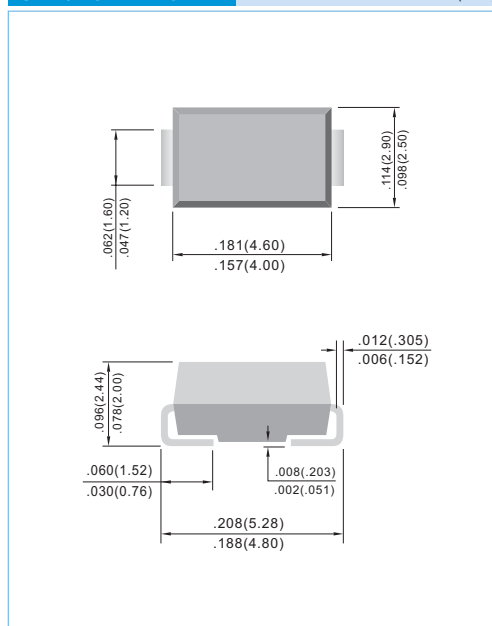
Polarity: Color band denotes positive end (cathode)

Standard packaging: 12mm tape (EIA-481)

Weight: 0.002 ounce, 0.064 gram

SMA/DO-214AC

Unit: inch (mm)



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Resistive or inductive load.

PARAMETER	SYMBOL	SX32	SX33	SX34	SX35	SX36	SX38	SX39	UNITS
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	20	30	40	50	60	80	90	V
Maximum RMS Voltage	V _{RMS}	14	21	28	35	42	56	64	V
Maximum DC Blocking Voltage	V _{DC}	20	30	40	50	60	80	90	V
Maximum Average Forward) lead length at TL=75°C	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 Forward Voltage at 3.0A (Note 1)	V _F	0.5			0.68		0.85		V
Maximum DC Reverse Current TA=25°C at Rated DC Blocking Voltage TA=100°C	I _R	0.5 20							mA
Maximum Thermal Resistance (Note 2)	R _{θJL} R _{θJA}	20 75							°C / W
Operating Junction Temperature Range	T _J	-55 TO +125							°C
Storage Temperature Range	T _{STG}	-55 TO +150							°C

NOTES:

1. Pulse Test with $PW=300\mu sec$, 1% Duty Cycle.
2. Mounted on P.C. Board with $8.0mm^2$ (.013mm thick) copper pad areas.

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RATING AND CHARACTERISTIC CURVES

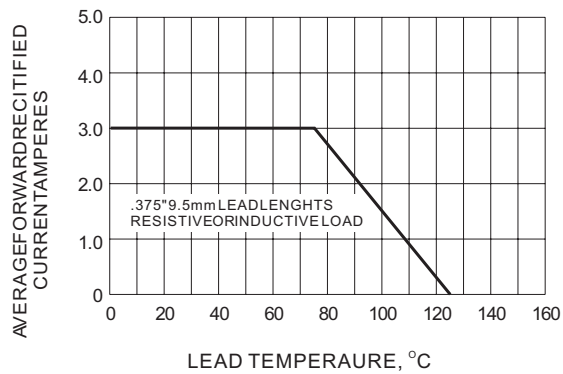


Fig.1- FORWARD CURRENT DERATING CURVE

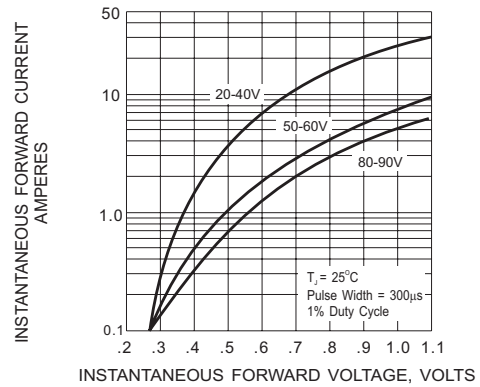


Fig.2- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

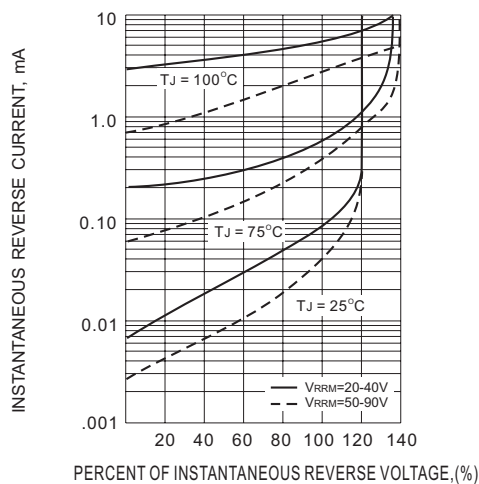


Fig.3- TYPICAL REVERSE CHARACTERISTIC

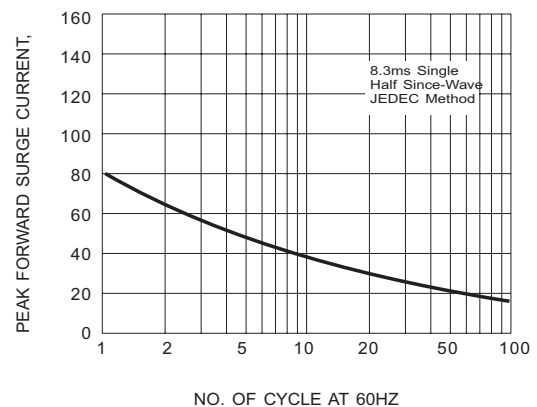


Fig.4- MAXIMUM NON - REPETITIVE SURGE CURRENT