



SX32 thru SX39

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

SMA/DO-214AC

Unit: inch (mm)

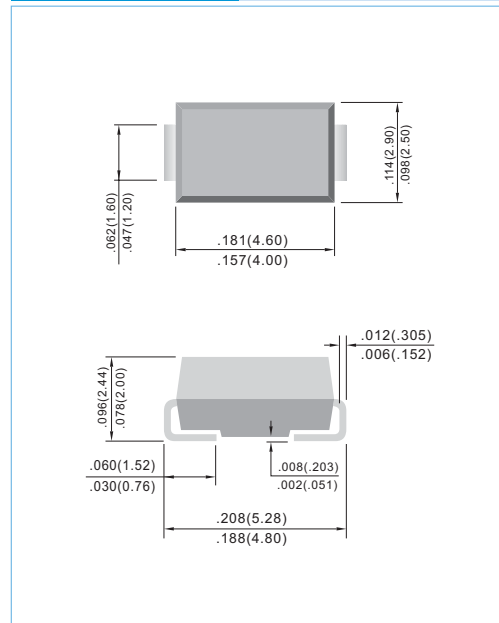
VOLTAGE 20 to 90 Volts **CURRENT** 3.0 Amperes

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



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 $T_L=75^\circ\text{C}$	$I_{F(AV)}$	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 $T_A=25^\circ\text{C}$ at Rated DC Blocking Voltage $T_A=100^\circ\text{C}$	I_R	0.5 20							mA
Maximum Thermal Resistance (Note 2)	$R_{\theta JL}$ $R_{\theta JA}$	20 75							$^\circ\text{C} / \text{W}$
Operating Junction Temperature Range	T_J	-55 TO +125							$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-55 TO +150							$^\circ\text{C}$

NOTES:

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



SX32 thru SX39

RATING AND CHARACTERISTIC CURVES

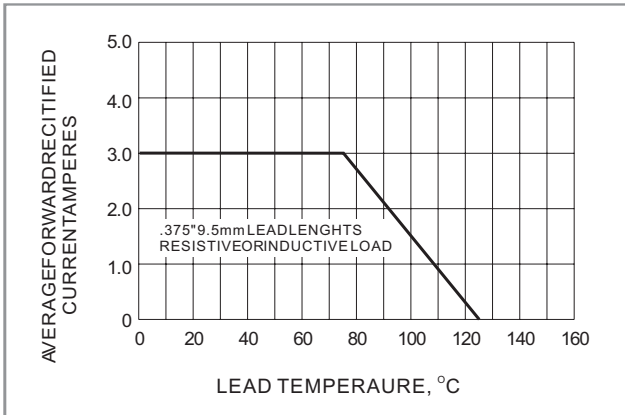


Fig.1- FORWARD CURRENT DERATING CURVE

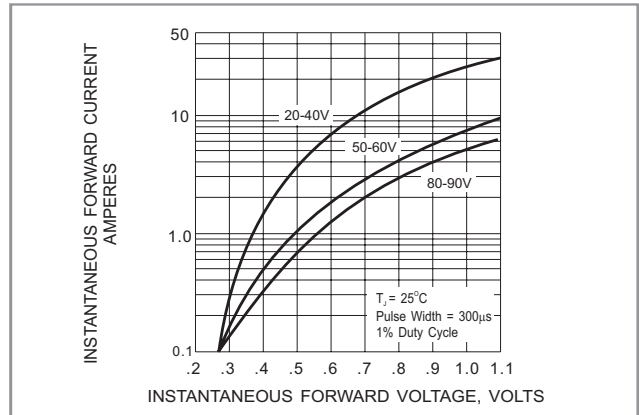


Fig.2- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

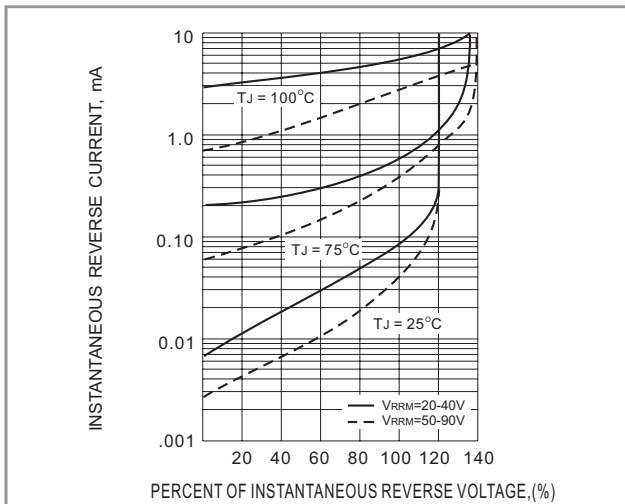


Fig.3- TYPICAL REVERSE CHARACTERISTIC

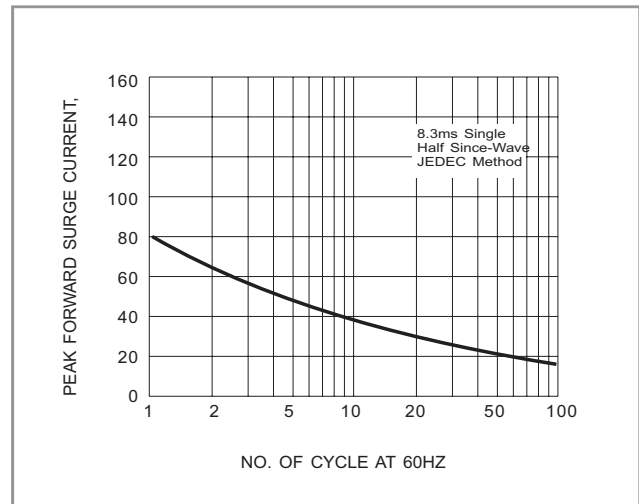


Fig.4- MAXIMUM NON - REPETITIVE SURGE CURRENT