PANJIT SEMI CONDUCTOR

DATA SHEET

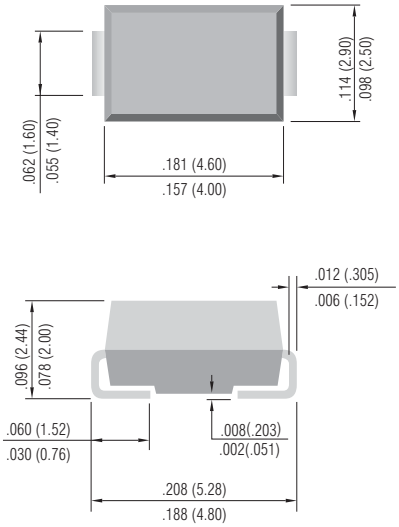
SX32~SX39

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

VOLTAGE- 20 to 90 Volts CURRENT- 3.0 Amperes

SMA / DO-214AC

Unit: inch (mm)



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

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.

	SYMBOLS	SX32	SX33	SX34	SX35	SX36	SX38	SX39	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20.0	30.0	40.0	50.0	60.0	80.0	90.0	V
Maximum RMS Voltage	V_{RMS}	14.0	21.0	28.0	35.0	42.0	56.0	71.0	V
Maximum DC Blocking Voltage	V_{DC}	20.0	30.0	40.0	50.0	60.0	80.0	90.0	V
Maximum Average Forward Rectified Current at T_L (See figure 1)	I(AV)	3.0							A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	80.0							A
Maximum Instantaneous Forward Voltage at 3.0A (Note 1)	V_F	0.50			0.75		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	17.0							°C/W
	RθJA	55.0							
Operating and Storage Temperature Range T_J	T_J	-50 to +150							°C
Storage Temperature Range	T_{STG}	-50 to +150							°C

NOTES:

A.Pulse Test with PW =300μsec, 2% Duty Cycle.

B.Mounted on P.C. Board with 14mm^2 (.013mm thick) copper pad areas.

RATING AND CHARACTERISTIC CURVES

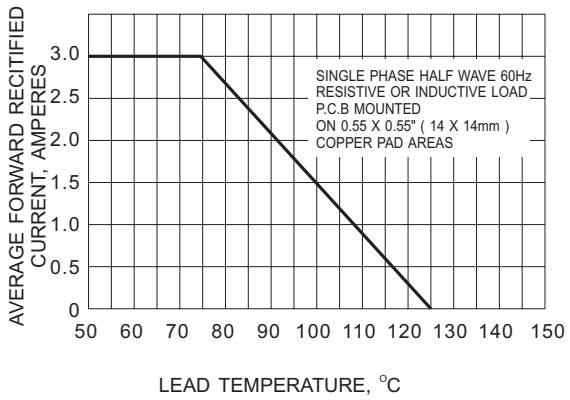


Fig.1- FORWARD CURRENT DERATING CURVE

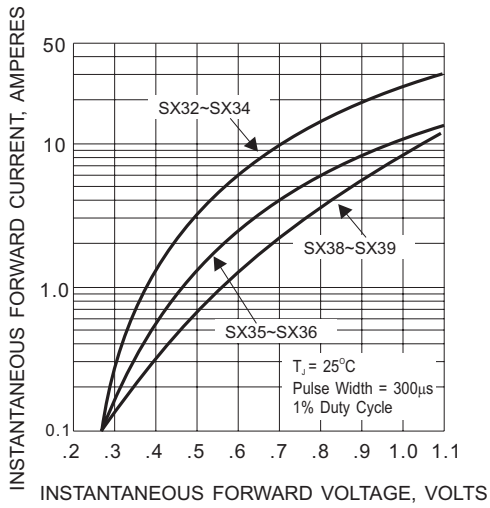


Fig.2- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

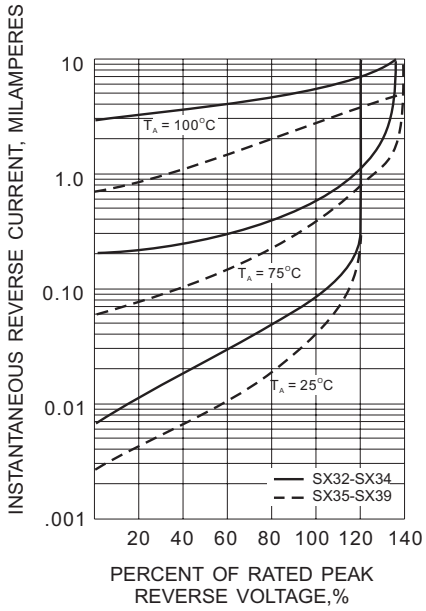


Fig.3- TYPICAL REVERSE CHARACTERISTIC

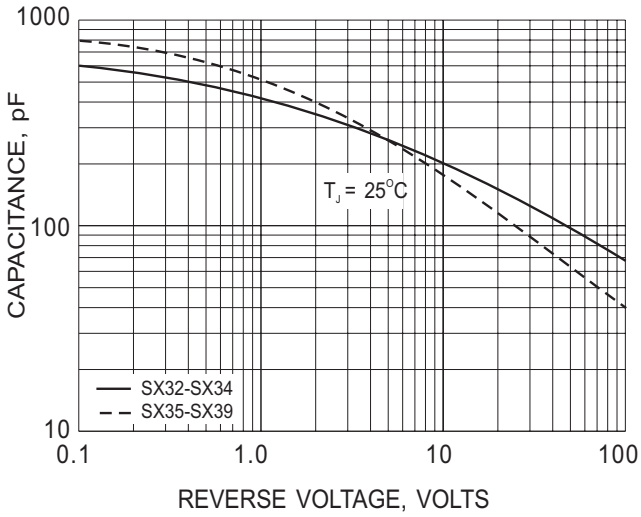


Fig.4- TYPICAL JUNCTION CAPACITANCE

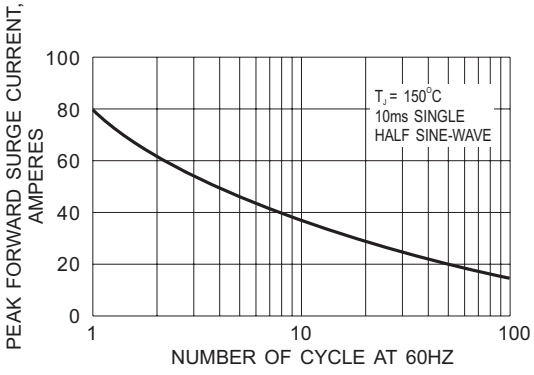


Fig.5- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT