PANJIT SEMI CONDUCTOR

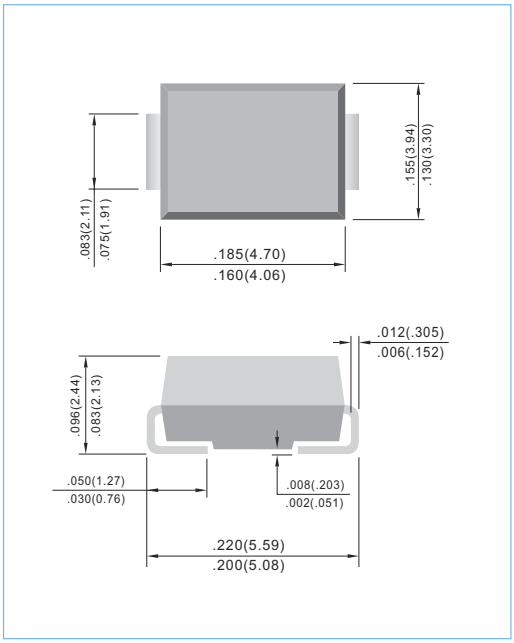
DATA SHEET

SR32 thru SR39

MINI SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

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

SMB/DO-214AA 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
- Pb free product are available : 99% Sn above can meet Rohs environment substance directive request

MECHANICAL DATA

Case: JEDEC DO-214AA molded plastic

Terminals:Solder plated, solderable per MIL-STD-202G, Method 208

Polarity: Color band denotes positive end (cathode)

Standard packaging: 12mm tape (EIA-481)

Weight: 0.093 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

PARAMETER	SYMBOL	SR32	SR33	SR34	SR35	SR36	SR38	SR39	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 Current .375"(9.5mm) lead length at T_L=75°C	I_{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			0.75		0.85		V
Maximum DC Reverse Current at T_A=25°C Rated DC Blocking Voltage T_A=100°C	I_R	0.5 20							mA
Maximum Thermal Resistance (Note 2)	$R_{\theta JL}$ $R_{\theta JA}$	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 =300μsec, 2% Duty Cycle.
2. Mounted on P.C. Board with 8.0mm^2 (.013mm thick) copper pad areas.

RATING AND CHARACTERISTIC CURVES

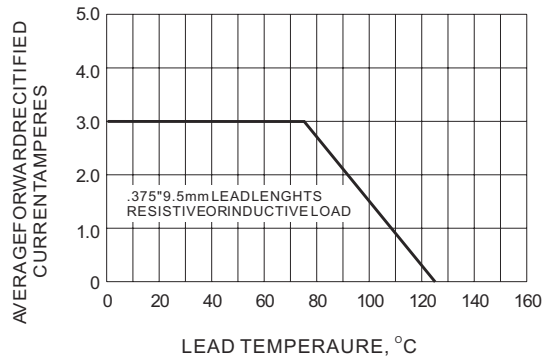


Fig.1- FORWARD CURRENT DERATING CURVE

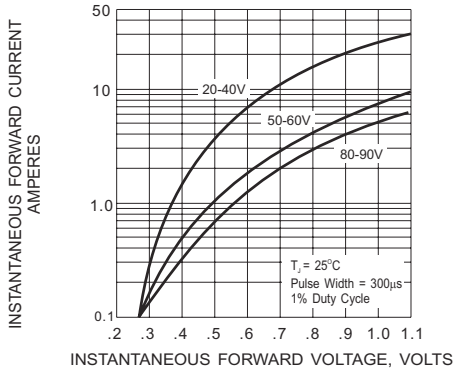


Fig.2- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

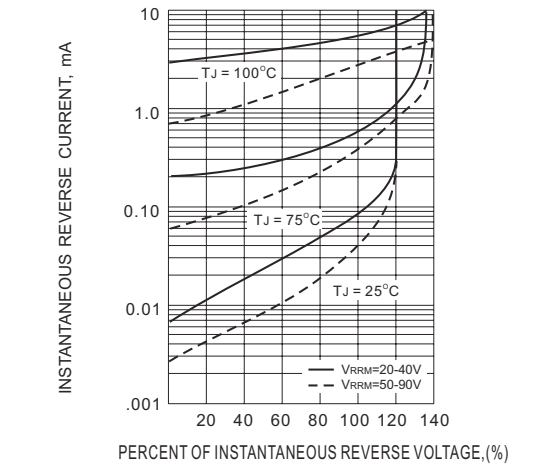


Fig.3- TYPICAL REVERSE CHARACTERISTIC

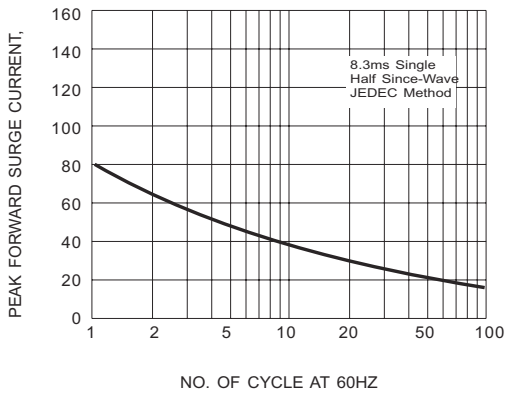


Fig.4- MAXIMUM NON - REPETITIVE SURGE CURRENT