SR3X SERIES

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

产

品

规

确

格

认

书

SR32 THRU S300

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER



REVERSE VOLTAGE: 20 to 100 VOLTS FORWARD CURRENT: 3.0 AMPERE

FEATURES

Plastic package has Underwriters Laboratory
 Flammability Classification 94V-O

- · For surface mounted applications
- · High current capacity
- · Built-in strain relief
- · Low profile package
- · Metal to silicon rectifier. majority carrier conduction
- · High surge capacity
- · Low power loss, high efficiency
- · For use in low voltage high frequency inverters, free wheeling, and polarity protection applications
- · High temperature soldering: 250°C /10 seconds at terminals

MECHANICAL DATA

Case: Molded plastic, DO-214AA(SMB)

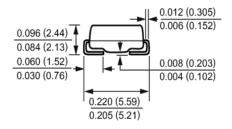
Terminals: Axial leads, solderable per MIL-STD-750,

method 2026 guaranteed

Polarity: Color band denotes cathode end Packaging: 12mm tape per EIA STD RS-481

Weight: 0.003 ounce, 0.093 gram

0.083 (2.11) 0.077 (1.96) 0.155 (3.94) 0.180 (4.57) 0.160 (4.06)



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

	Symbols	SR32	SR33	SR34	SR35	SR36	SR38	SR39	S300	Units
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	20	30	40	50	60	80	90	100	Volts
Maximum RMS Voltage	V _{RMS}	14	21	28	35	42	56	64	71	Volts
Maximum DC Blocking Voltage	V_{DC}	20	30	40	50	60	80	90	100	Volts
$ \label{eq:maximum Average Forward Rectified Current} $ at $T_L \ (See \ Fig. \ 1)$	I _(AV)	3.0								Amp
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	80								Amp
Maximum Forward Voltage at 3.0A (Note 1)	V_{F}	0.50			0.70			0.85		Volts
Maximum Reverse Current at T_A =25°C at Rated DC Blocking Voltage T_A =100°C	I_R	0.5 20								mAmp
Typical Thermal Resistance (Note 2)	$R_{ heta JA} \ R_{ heta JL}$	55 17								°C/W
Operating Junction Temperature Range	$T_{ m J}$	-55 to +125								С
Storage Temperature Range	Tstg	-55 to +150								ဗ

NOTES:

- 1- Pulse test: 300µs pulse width, 1% duty cycle
- 2- P.C.B. mounted with 0.3 x 0.3" (8.0 x 8.0mm) Copper Pad Areas



RATINGS AND CHARACTERISTIC CURVES

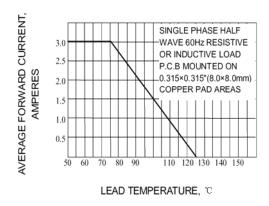
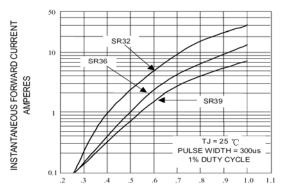
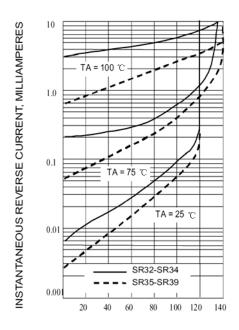


Fig. 1-FORWARD CURRENT DERATING CURVE



TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

Fig. 2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



PERCENT OF RATED PEAK REVERSE VOLTAGE

Fig. 3-TYPICAL REVERSE CHARACTERISTICS

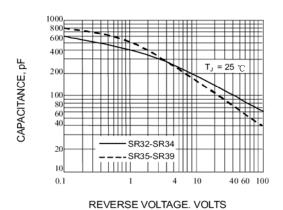


Fig. 4-TYPICAL JUNCTION CAPACITANCE

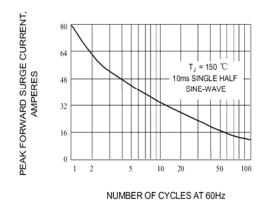


Fig. 5-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT