CHINA BASE INTERNATIONAL

SMC
SS32-SS310

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SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

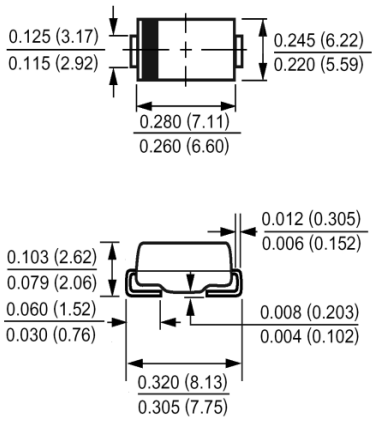
REVERSE VOLTAGE: **20 to 100 VOLTS**

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 : 260°C /10 seconds at terminals

DO-214AB(SMC)



Dimensions in inches and (millimeters)

MECHANICAL DATA

Case: Molded plastic, DO-214AB(SMC)

Terminals: Axial leads, solderable per MIL-STD-750, method 2026 guaranteed

Polarity: Color band denotes cathode end

Packaging: 16mm tape per EIA STD RS-481

Weight: 0.007 ounce, 0.21 gram

Maximum Ratings and Electrical Characteristics

Ratings at 25℃ ambient temperature unless otherwise specified.

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

For capacitive load, derate current by 20%.

	Symbols									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**
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}	100								**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℃ at Rated DC Blocking Voltage T_A=100℃	I_R	0.5 20								**mAmp**
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$ $R_{\theta JL}$	55 17								**℃/W**
Operating Junction Temperature Range	T_J	-55 to +125								**℃**
Storage Temperature Range	Tstg	-55 to +150								**℃**

NOTES:

1- Pulse test: 300μs pulse width, 1% duty cycle

2- P.C.B. mounted with 0.55 x 0.55" (14 x 14mm) Copper Pad Areas

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER **SS32 THRU SS310**

RATINGS AND CHARACTERISTIC CURVES

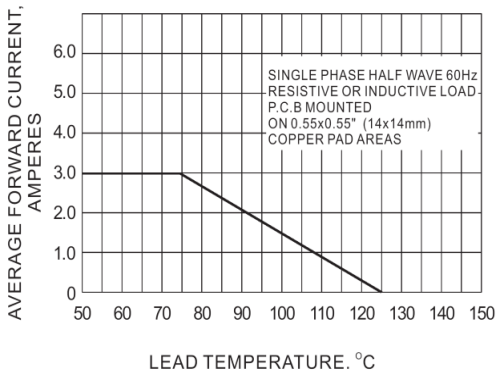


Fig.1- FORWARD CURRENT DERATING CURVE

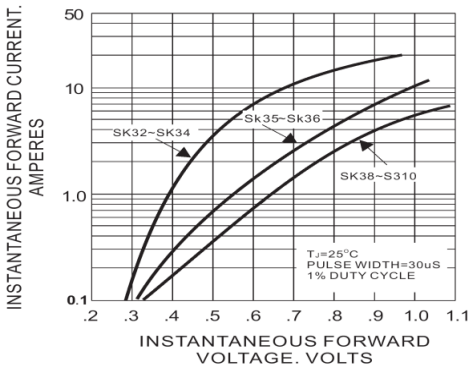


Fig.2- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

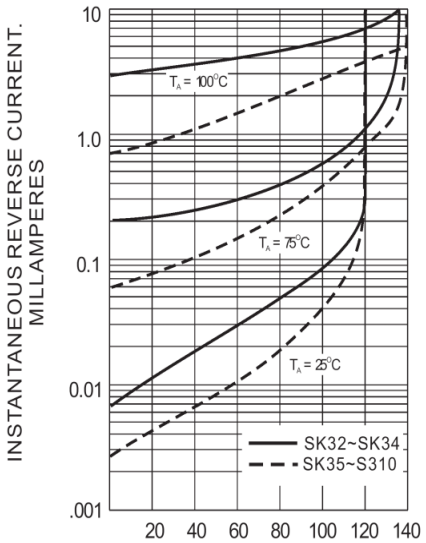


Fig.3- TYPICAL REVERSE CHARACTERISTICS

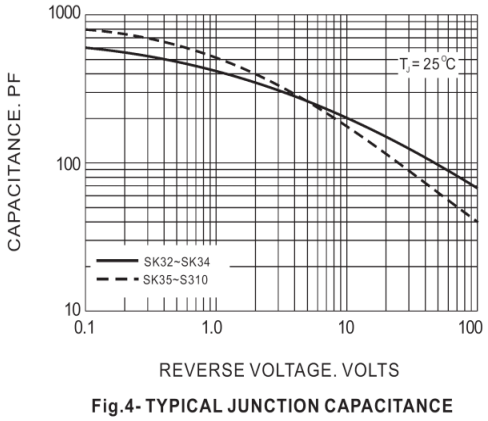


Fig.4- TYPICAL JUNCTION CAPACITANCE

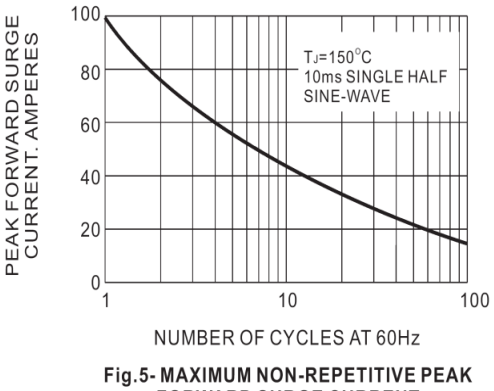


Fig.5- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT