

DATA SHEET

SK32E ~ SK36E

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

VOLTAGE	20 to 60 Volts	CURRENT	3.0 Amperes
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SMC/DO-214AB

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
- ESD Passed devices : Air mode 15KV ,human body mode 8KV

MECHANICAL DATA

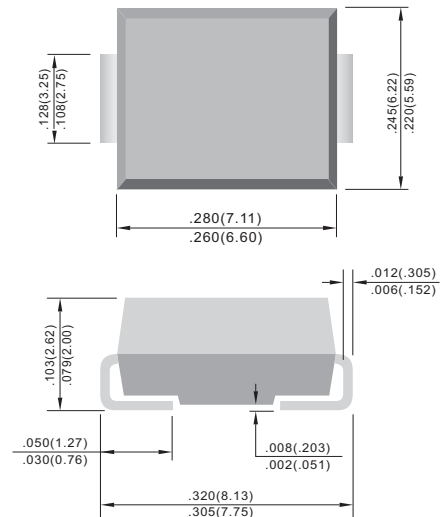
Case: JEDEC DO-214AB molded plastic

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

Polarity: Color band denotes positive end (cathode)

Standard packaging: 16mm tape (EIA-481)

Weight: 0.007 ounce, 0.21 gram



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Resistive or inductive load.

PARAMETER	SYMBOL	SK32E	SK33E	SK34E	SK35E	SK36E	UNITS
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	20	30	40	50	60	V
Maximum RMS Voltage	V _{RMS}	14	21	28	35	42	V
Maximum DC Blocking Voltage	V _{DC}	20	30	40	50	60	V
Maximum Average Forward Rectified Current .375" (9.5mm) lead length at T _L =75°C	I _{AV}	3					A
Peak Forward Surge Current :8.3ms single half sine-wave superimposed on rated load(JEDEC method)	I _{FSM}	100					A
Maximum Forward Voltage at 3.0A	V _F	0.5			0.75		V
Maximum DC Reverse Current TA=25°C at Rated DC Blocking Voltage TA=100°C	I _R	0.5 20					mA
Maximunl Thermal Resisance	R _{θJL} R _{θJA}	20 75					°C / W
Operating Junction and Storage Temperature Range	T _J , T _{STG}	-50 to +125					°C

NOTES:

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

RATING AND CHARACTERISTIC CURVES

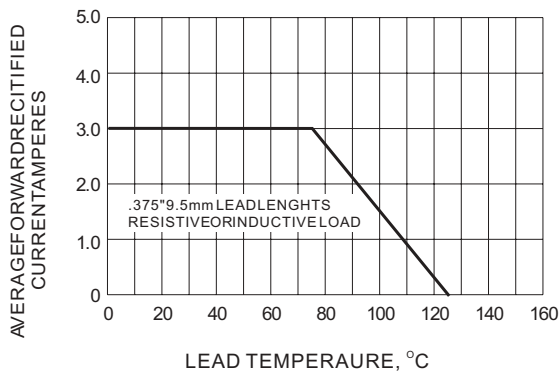


Fig.1- FORWARD CURRENT DERATING CURVE

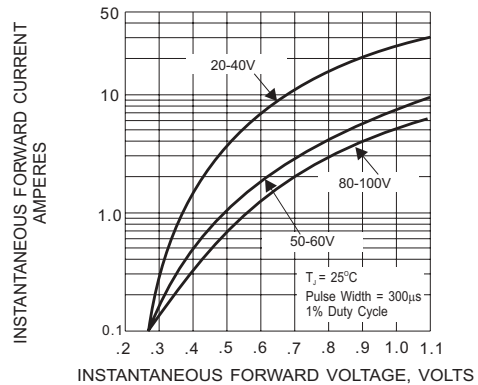


Fig.2- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

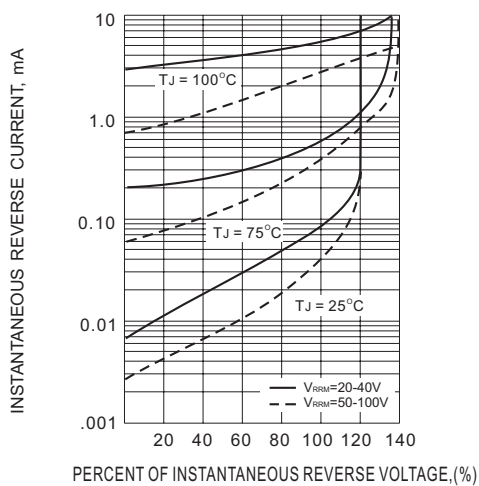


Fig.3- TYPICAL REVERSE CHARACTERISTICS

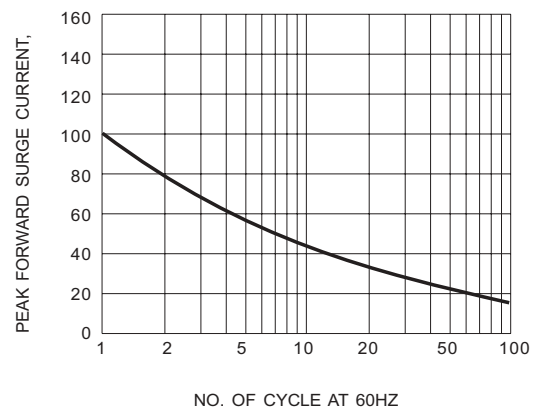


Fig.4- MAXIMUM NON - REPETITIVE SURGE CURRENT