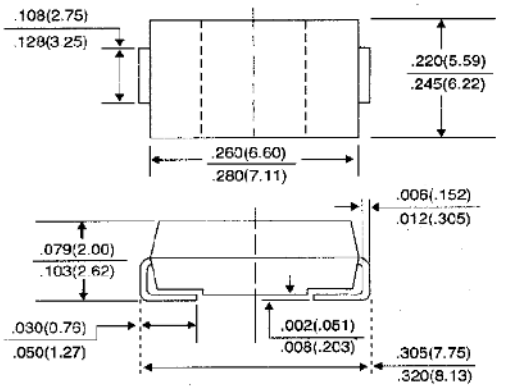
SK32 THRU S310

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER
VOLTAGE - 20 TO 100 Volts CURRENT - 3.0 Amperes

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 current capability, low V_F
- 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

SMC/DO-214AB



Dimensions in inches and (millimeters)

MECHANICAL DATA

Case: JEDEC DO-214AB molded plastic

Terminals: Solder plated solderable per MIL-STD-750, Method 2026

Polarity: Color band denotes cathode

Standard Packaging: 16mm tape (EIA-481)

Weight: 0.007 ounces 0.21 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	SYMBOLS	SK32	SK33	SK34	SK35	SK36	SK38	SK39	S310	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 = 75°C	$I_{(AV)}$	3.0								Amps
Peak forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	100								Amps
Maximum Instantaneous Forward Voltage at 3.0A (NOTE 1)	V_F	0.50			0.75		0.85			Volts
Maximum DC Reverse Current (NOTE 1) T_A = 25°C at Rated DC Blocking Voltage T_A = 100°C	I_R	0.5 20.0								mA
Maximum Thermal Resistance (NOTE 2)	RθJL RθJA	17 55								°C/W
Operating Junction Temperature Range	T_J	-50 to +125								°C
Storage Temperature Range	T_{STG}	-50 to +150								°C

NOTES:
1. Pulse Test with PW = 300μsec, 2% Duty Cycle.
2. Mounted on P.C. Board with 14 mm² (.013mm thick) copper pad areas.

SURGE COMPONENTS, INC. 1016 GRAND BLVD., DEER PARK, NY 11729
PHONE (631) 595-1818 FAX (631) 595-1283 www.surgecomponents.com

RATING AND CHARACTERISTIC CURVES
SK32 THRU S310

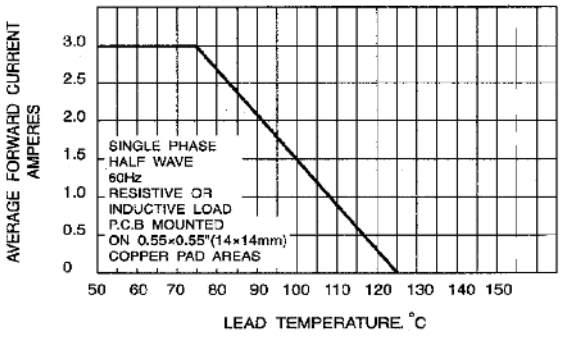


FIG. 1 – FORWARD CURRENT DERATING CURVE

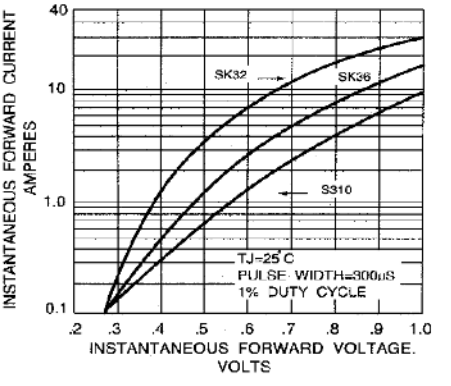


FIG. 2 – TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

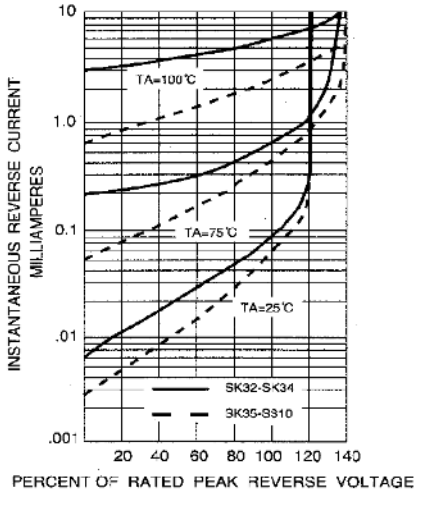


FIG. 3 – TYPICAL REVERSE CHARACTERISTICS

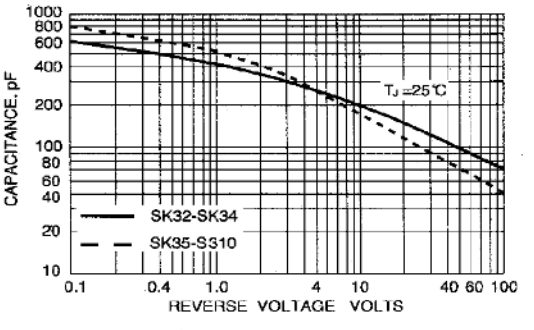


FIG. 4 – TYPICAL JUNCTION CAPACITANCE

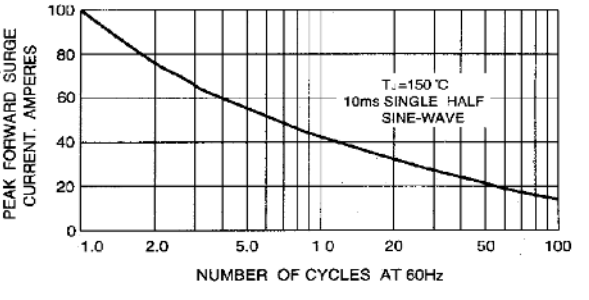


FIG. 5 – MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

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