

**TAYCHIPST**

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS

SK32 THRU SK310

20V-100V 3.0A

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 $^{\circ}\text{C}$ /10 seconds at terminals

MECHANICAL DATA

Case: JEDEC DO-214AB molded plastic

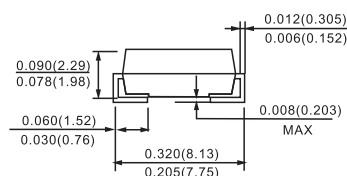
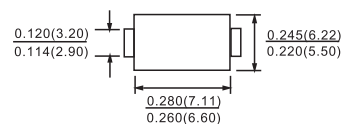
Terminals: Solder plated, solderable per MIL-STD-750, Method 2026

Polarity: Color band denotes cathode

Standard packaging: 16mm tape (EIA-481)

Weight: 0.007 ounce, 0.21 gram

DO-214AB(SMC)



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICSRatings at 25 $^{\circ}\text{C}$ 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 $T_L=75\text{ }^{\circ}\text{C}$	$I_{(AV)}$	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			0.70		0.85			Volts
Maximum DC Reverse Current $T_A=25\text{ }^{\circ}\text{C}$ (Note 1) At Rated DC Blocking Voltage $T_A=100\text{ }^{\circ}\text{C}$	I_R	0.5 20.0								mA
Maximum Thermal Resistance (Note 2)	$R_{\theta KJL}$ $R_{\theta KJA}$	17 55								$^{\circ}\text{C}/\text{W}$
Operating Junction Temperature Range	T_J	-50 to +125								$^{\circ}\text{C}$
Storage Temperature Range	T_{STG}	-50 to +150								$^{\circ}\text{C}$

NOTES:

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

SK32-SK310

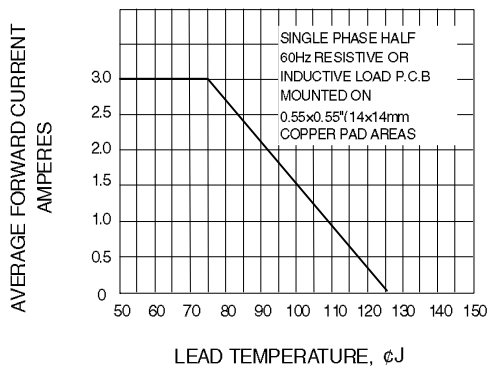


Fig. 1-FORWARD CURRENT DERATING CURVE

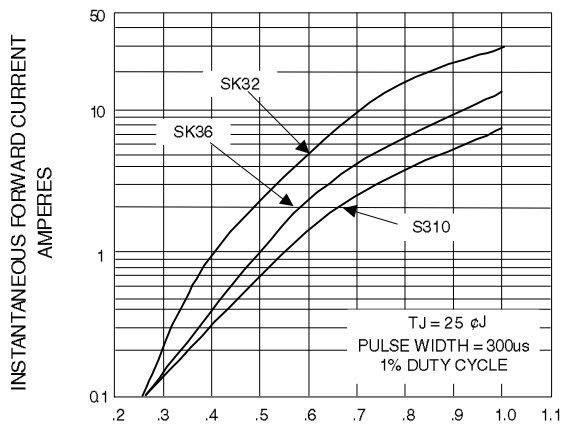


Fig. 2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

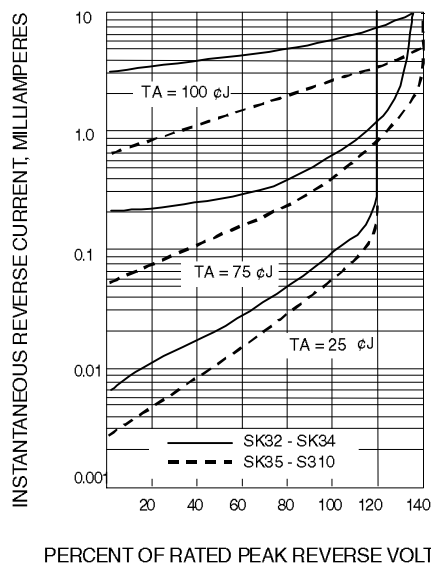


Fig. 3-TYPICAL REVERSE CHARACTERISTICS

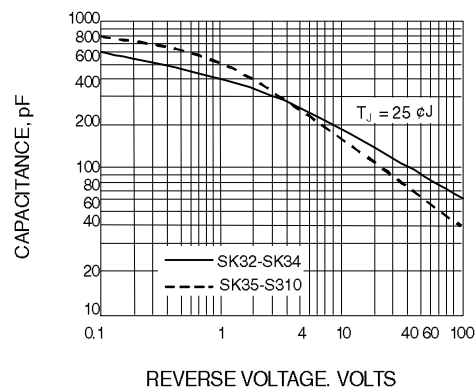


Fig. 4-TYPICAL JUNCTION CAPACITANCE

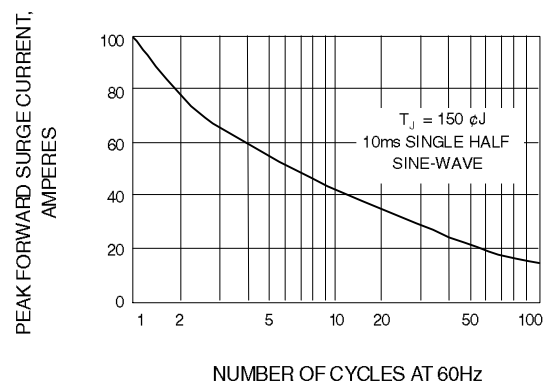


Fig. 5-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT