



SK32B THRU SK320B

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

REVERSE VOLTAGE: 20 to 200 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
- Suffix "H" indicates Halogen-free parts, ex. SK32BH

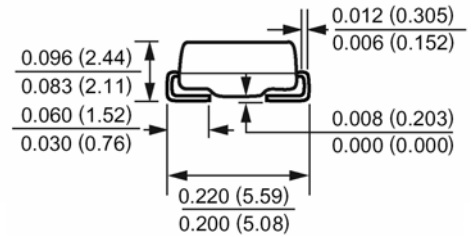
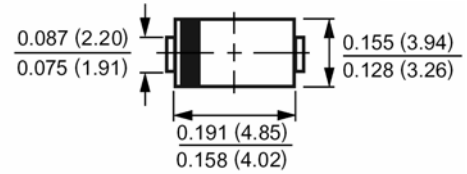
MECHANICAL DATA

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

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

Polarity: Color band denotes cathode end

DO-214AA(SMB)



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%.

Parameter	Symbols	SK32B	SK33B	SK34B	SK35B	SK36B	SK38B	SK310B	SK315B	SK320B	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	30	40	50	60	80	100	150	200	Volts
Maximum RMS Voltage	V_{RMS}	14	21	28	35	42	56	71	105	140	Volts
Maximum DC Blocking Voltage	V_{DC}	20	30	40	50	60	80	100	150	200	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}	80.0									Amp
Maximum Forward Voltage at 3.0A (Note 1)	V_F	0.50	0.55	0.75			0.85	0.95		Volts	
Maximum Reverse Current at $T_A=25^\circ\text{C}$ at Rated DC Blocking Voltage $T_A=100^\circ\text{C}$	I_R	0.5									mAmp
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	55.0									°C/W
	$R_{\theta JL}$	17.0									
Operating Junction Temperature Range	T_J	-55 to +125				-55 to +150					°C
Storage Temperature Range	T_{stg}	-55 to +150									°C

NOTES:

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

2- Thermal resistance from junction to ambient mounted on P.C.B. with 0.3 x 0.3" (8.0 x 8.0mm) copper pad areas



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RATINGS AND CHARACTERISTIC CURVES

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

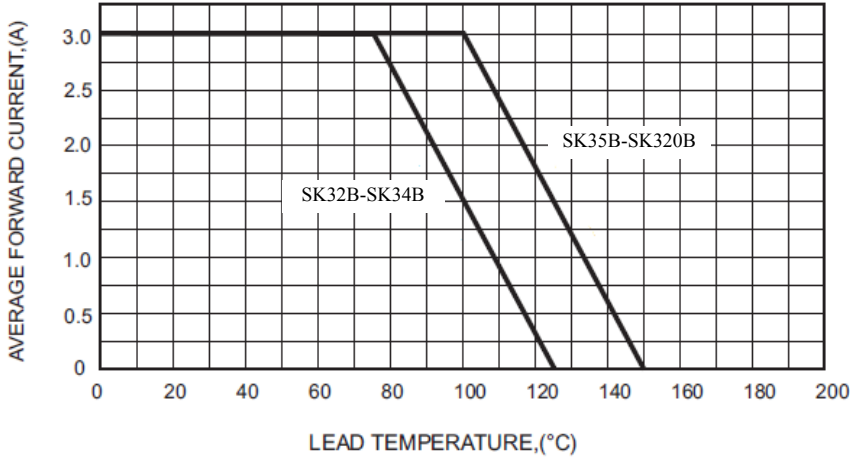


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

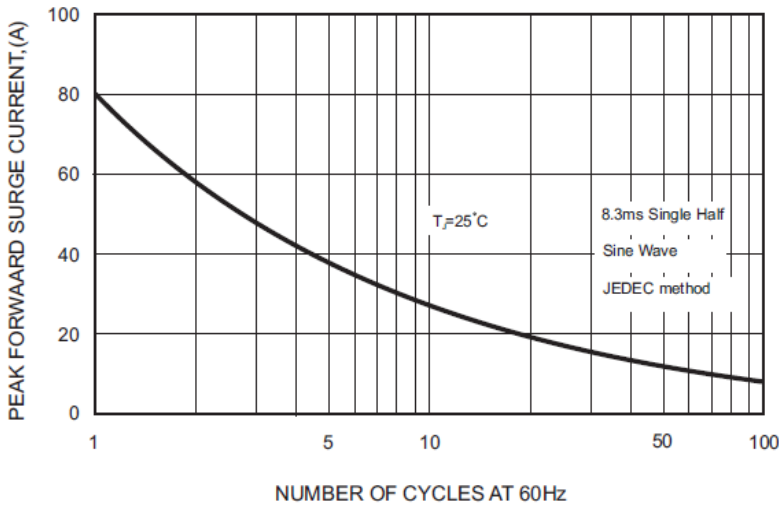


FIG.4-TYPICAL JUNCTION CAPACITANCE

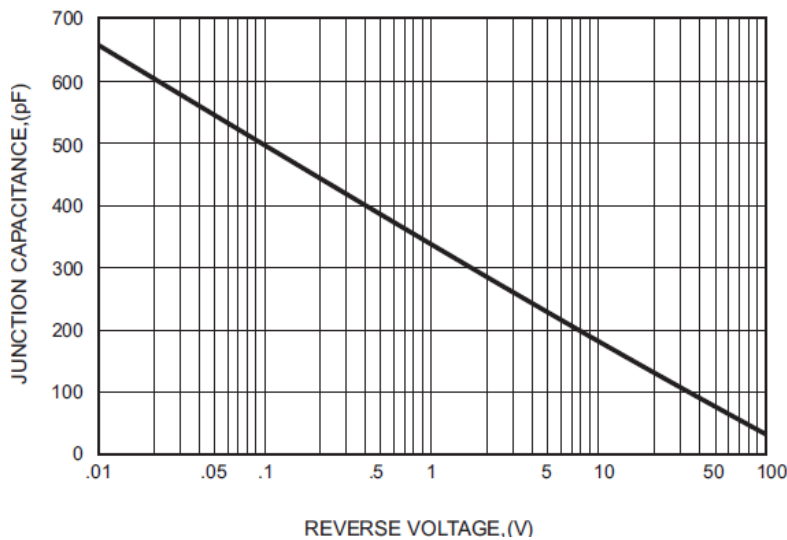


FIG.2-TYPICAL FORWARD CHARACTERISTICS

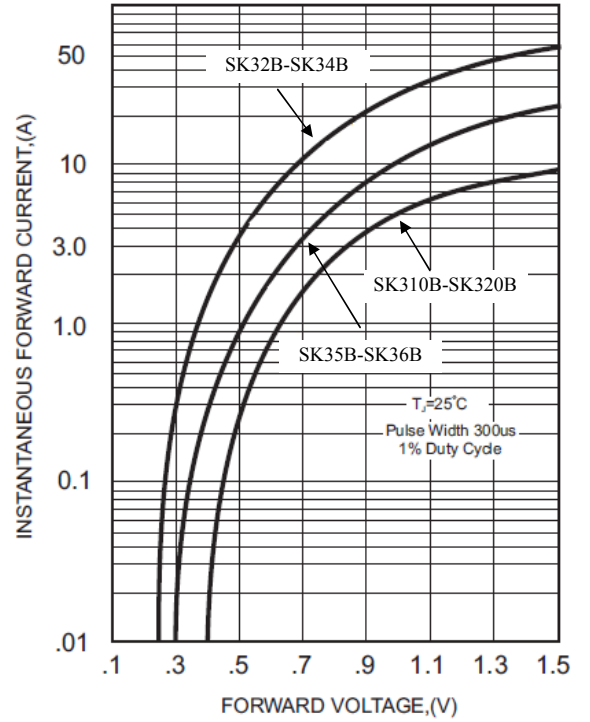


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

