SK52B THRU SK510B

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

Reverse Voltage - 20 to 100 Volts Forward Current - 5.0 Ampere

FEATURES

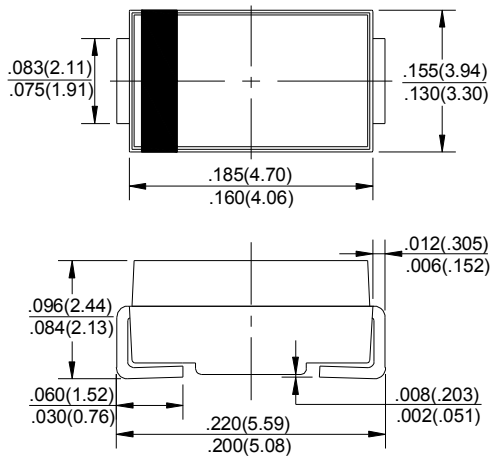
- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- For surface mounted applications
- Metal silicon junction,majority carrier conduction
- Low reverse leakage
- Built-in strain relief,ideal for automated placement
- High forward surge current capability
- High temperature soldering guaranteed: 250℃/10 seconds at terminals

MECHANICAL DATA

Case: JEDEC SMB(DO-214AA) molded plastic body
Terminals: Solder plated , solderable per MIL-STD-750, Method 2026
Polarity: Color band denotes cathode end
Mounting Position: Any
Weight:0.005 ounce, 0.138 grams

RoHS Compliant

SMB (DO-214AA)



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25℃ ambient temperature unless otherwise specified.
Single phase half-wave 60Hz,resistive or inductive load,for capacitive load current derate by 20%.

Characteristic	*SYMBOLS*	SK52B	SK53B	SK54B	SK55B	SK56B	SK58B	SK510B	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	20	30	40	50	60	80	100	V
Maximum RMS voltage	V_{RMS}	14	21	28	35	42	56	70	V
Maximum DC blocking voltage	V_{DC}	20	30	40	50	60	80	100	V
Maximum average forward rectified current at T_L(see fig.1)	$I_{(AV)}$	5.0							A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	120.0							A
Maximum instantaneous forward voltage at 5.0A	V_F	0.55			0.70		0.85		V
Maximum DC reverse current T_A=25℃	I_R	0.5					0.1		mA
at rated DC blocking voltage T_A=100℃		20			10		2.0		
Typical junction capacitance (NOTE 1)	C_J	300							pF
Typical thermal resistance (NOTE 2)	$R_{\theta JA}$	75							℃/W
Operating junction temperature range	T_J,	-55 to +125			-55 to +150				℃
Storage temperature range	T_{STG}	-55 to +150							℃

Note:1.Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2.P.C.B. mounted with 0.2x0.2″(5.0x5.0mm) copper pad areas

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RATINGS AND CHARACTERISTIC CURVES

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

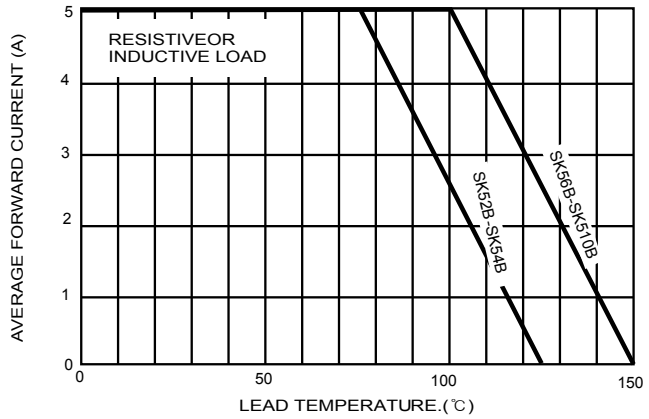

FIG.2 - TYPICAL FORWARD CHARACTERISTICS

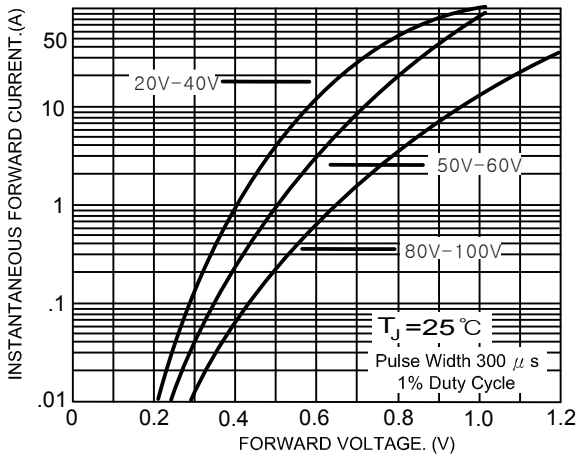

FIG.3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

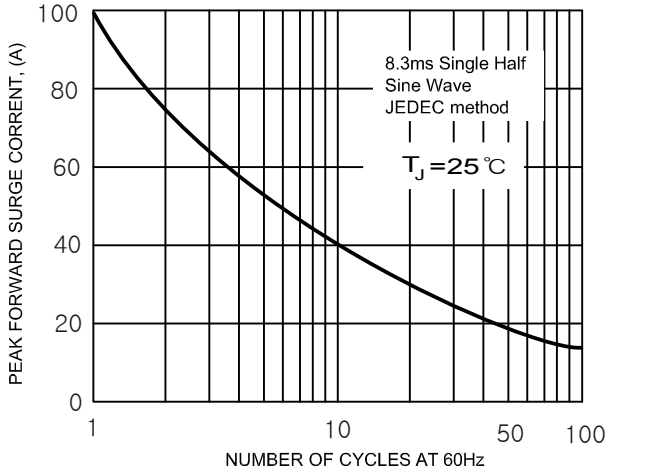

FIG.4- TYPICAL JUNCTION CAPACITANCE

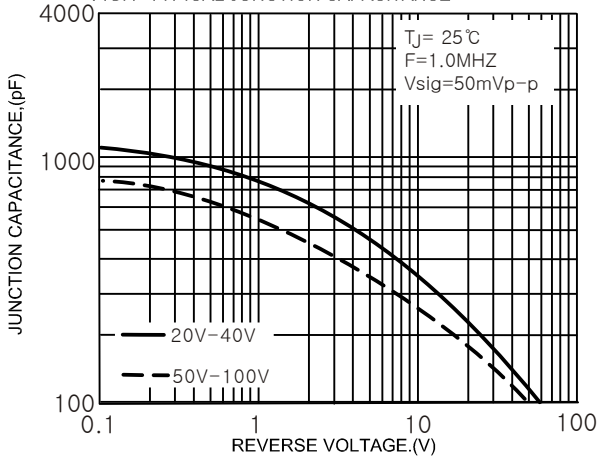

FIG.5- TYPICAL REVERSE CHARACTERISTICS