

SK32B-SK310B

Surface Mount Schottky Barrier Rectifiers

REVERSE VOLTAGE: 20 - 100 V
FORWARD CURRENT: 3.0 A



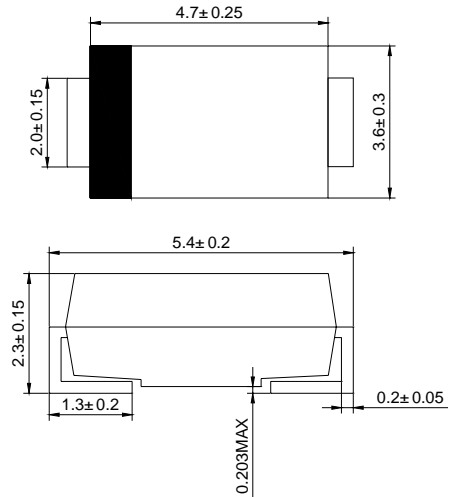
SMB

Features

- ◇ Schottky barrier rectifier
- ◇ Guardring protection
- ◇ Low forward voltage
- ◇ Reverse energy tested
- ◇ High current capability
- ◇ Extremely low thermal resistance

Mechanical Data

- ◇ Case: SMB molded plastic body
- ◇ Polarity: Color band denotes cathode end
- ◇ Mounting position: ANY
- ◇ Weight: 0.003 ounces, 0.093 gram



Dimensions in millimeters

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified

		SK32B	SK33B	SK34B	SK35B	SK36B	SK38B	SK39B	SK310B	UNITS	
Maximum repetitive peak reverse voltage	V_{RRM}	20	30	40	50	60	80	90	100	V	
Maximum RMS voltage	V_{RWS}	14	21	28	35	42	56	63	70	V	
Maximum DC blocking voltage	V_{DC}	20	30	40	50	60	80	90	100	V	
Maximum average forward rectified current at $T_L=90^\circ\text{C}$	$I_{F(AV)}$	3.0								A	
Peak forward surge current 8.3ms single half-sine-wave	I_{FSM}	100.0								A	
Maximum instantaneous forward voltage at $I_{FM}=3.0\text{A}$ (NOTE1)	V_F	0.50			0.70		0.85			V	
Maximum DC reverse current $T_J=25^\circ\text{C}$ at rated DC blocking voltage $T_J=100^\circ\text{C}$	I_R	0.5				20.0					mA
Maximum thermal resistance	$R_{\theta JL}$	17.0								$^\circ\text{C}/\text{W}$	
Operating temperature range	T_J	- 55 ---- +125								$^\circ\text{C}$	
Storage temperature range	T_{STG}	- 55 ---- +150								$^\circ\text{C}$	

NOTE: 1.Pulse test: Pulse width 300us,duty cycle 1 %

Ratings AND Characteristic Curves

FIG.1 – FORWARD DERATING CURVE

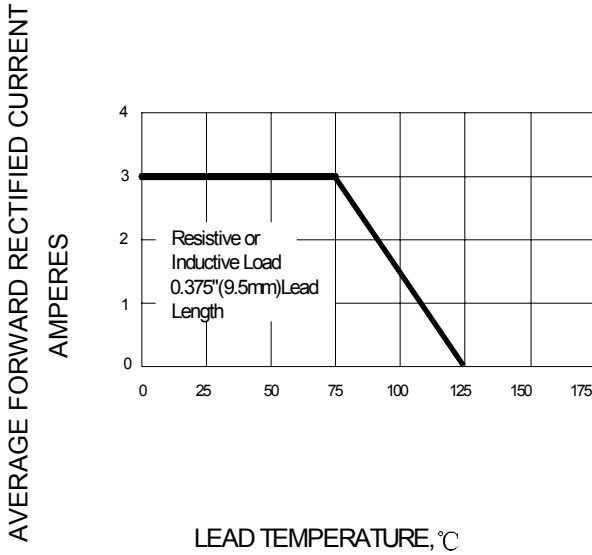


FIG.2 – PEAK FORWARD SURGE CURRENT

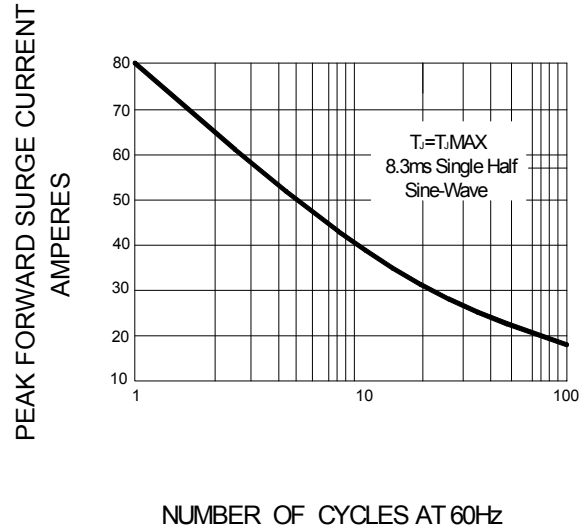


FIG.3 – TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

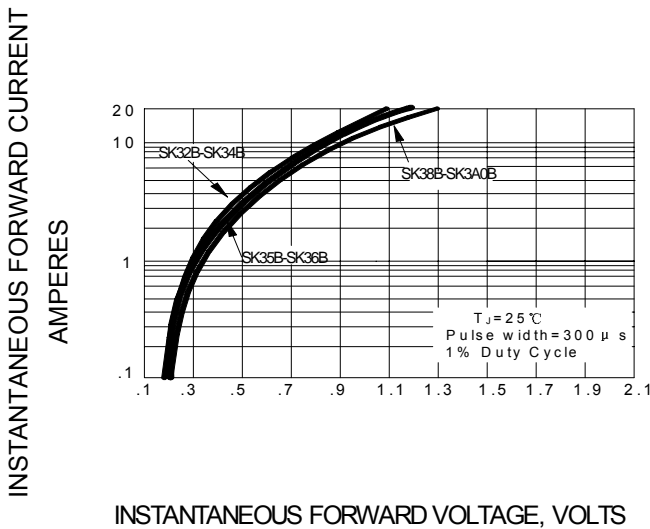


FIG.4 – TYPICAL JUNCTION CAPACITANCE

