

RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

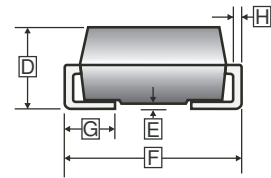
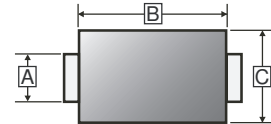
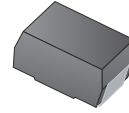
FEATURES

- High Current Capability
- High Surge Current Capability
- Low Reverse Current
- Qualified to AEC-Q101 standards for high reliability

MECHANICAL DATA

- Case: Molded Plastic. UL Flammability Classification Rating 94V-0
- Terminals: Lead Free Plating (Tin Finish) Solderable per MIL-STD-202 method 208
- Polarity: Cathode Band

SMB



PACKAGE INFORMATION

Package	MPQ	Leader Size
SMB	3K	13 inch

ORDER INFORMATION

Part Number	Type
SK5150BCR-C	Lead (Pb)-free and Halogen-free

REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	1.85	2.20	E	-	0.203
B	4.00	4.75	F	5.08	5.59
C	3.25	3.94	G	0.75	1.52
D	1.99	2.61	H	0.15	0.31

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS ($T_A=25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Ratings	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	150	V
Maximum RMS Voltage	V_{RMS}	105	
Maximum DC Blocking Voltage	V_{DC}	150	
Maximum Average Forward Rectified Current	I_F	5	A
Peak Forward Surge Current @8.3ms Single Half Sine-Wave Superimposed on Rated Load	I_{FSM}	150	A
Maximum Instantaneous Forward Voltage $I_F=5A$ @25°C	V_F	0.75	V
Maximum DC Reverse Current @Rated DC Blocking Voltage	$T_A=25^\circ\text{C}$	0.5	mA
	$T_A=100^\circ\text{C}$	10	
Typical Junction Capacitance ¹	C_J	720	pF
Typical Thermal Resistance from Junction-Ambient	$R_{\theta JA}$	60	°C/W
Typical Thermal Resistance from Junction-Case	$R_{\theta JC}$	20	
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-55~150	°C

Note:

1. Measured at 1MHz and applied reverse voltage of 4V D.C.

CHARACTERISTIC CURVES

FIG. 1-Typical Forward Current Derating Curve

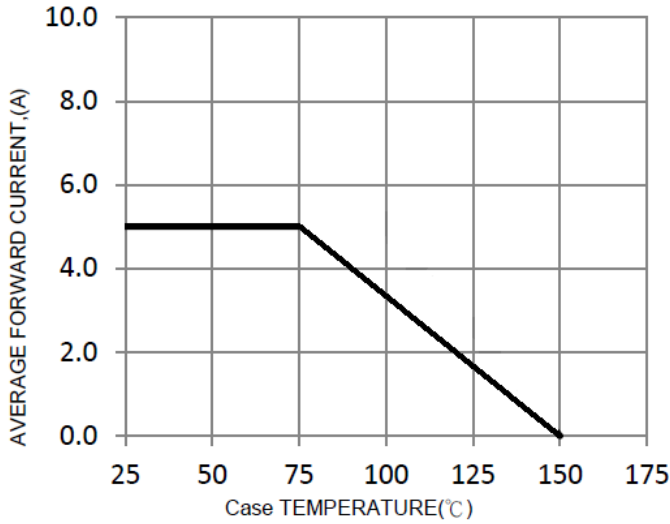


FIG. 2-Typical Forward Characteristics

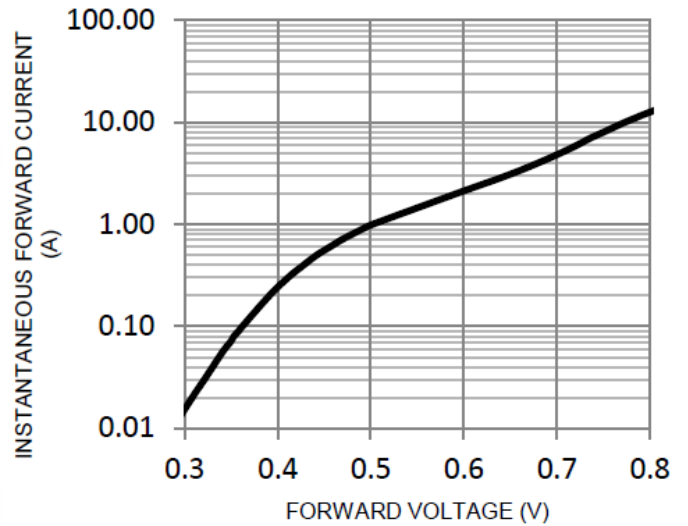


FIG. 3-Maximum Non-Repetitive Forward Surge Current

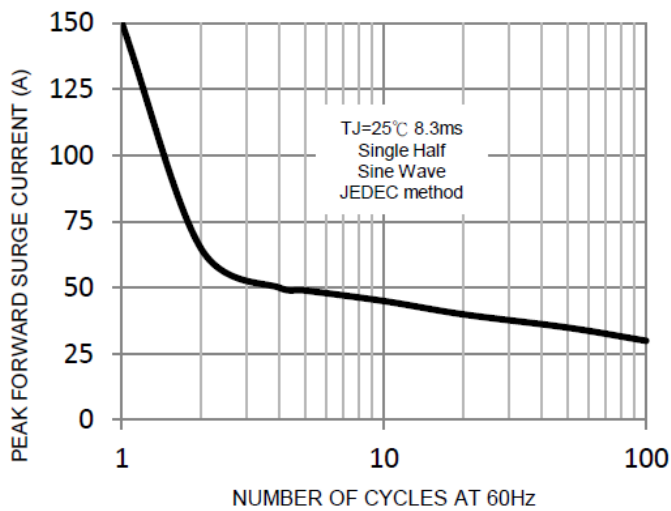


FIG. 4-Typical Reverse Characteristics

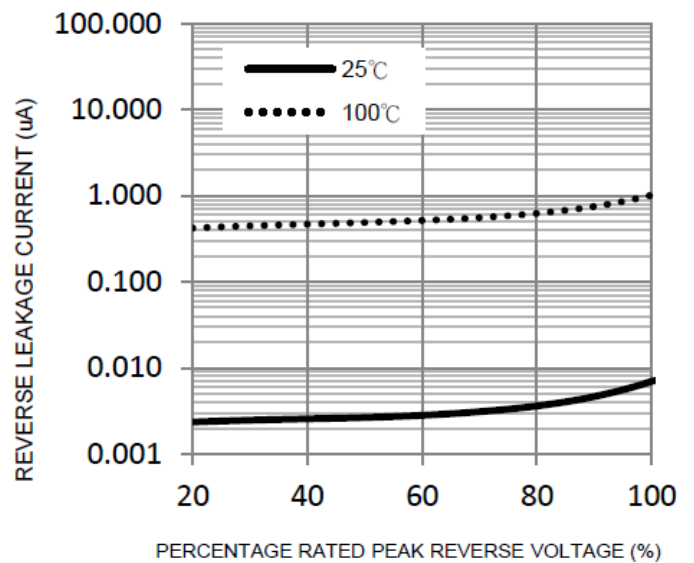


FIG. 5-Typical Junction Capacitance

