Elektronische Bauelemente

SK5100B-C

100V, 5A

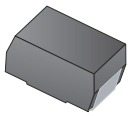
Low V_F Schottky Barrier Rectifiers

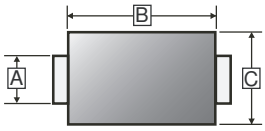
RoHS Compliant Product
A suffix of “-C” specifies halogen & lead-free

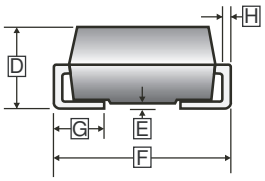
FEATURES

- Low Profile Package
- Ideal for Automated Placement
- Guardring for Overvoltage Protection
- Low Power Losses, High Efficiency
- High Forward Surge Capability
- Meets MSL level 1, per J-STD-020, LF Maximum Peak of 260℃

SMB







REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	1.85	2.20	E	-	0.25
B	4.00	4.85	F	5.05	5.59
C	3.25	3.94	G	0.75	1.55
D	1.90	2.61	H	0.15	0.31

MECHANICAL DATA

- Case: SMB
  Molding Compound Meets UL 94 V-0 Flammability Rating
- Terminals: Tin Plated Leads, Solderable per J-STD-002 and JESD22-B102
- Polarity: Cathode Line Denotes the Cathode End

PACKAGE INFORMATION

Package	MPQ	Leader Size
SMB	3K	13 inch

ORDER INFORMATION

Part Number	Type
SK5100B-C	Lead (Pb)-free and Halogen-free

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T_A=25℃ unless otherwise noted)

Parameter		Symbol	Ratings	Unit
Repetitive Peak Reverse Voltage		V_{RRM}	100	V
Average Rectified Output Current		I_O	5	A
Surge(Non-repetitive)Forward Current, 8.3ms single half sine-wave superimposed on rated load		I_{FSM}	100	A
Maximum Instantaneous Forward Voltage Drop Per Diode @I_F=5A		V_F	0.7	V
Maximum DC Reverse Current at Rated DC Blocking Voltage @V_R=V_{RRM}	T_A=25℃	I_R	0.1	mA
	T_A=100℃		20	
Thermal Resistance from Junction-Ambient [1]		$R_{\theta JA}$	65	℃/W
Thermal Resistance from Junction-Case [1]		$R_{\theta JC}$	15	
Thermal Resistance from Junction-Lead [1]		$R_{\theta JL}$	16	
Operating Junction & Storage Temperature Range		T_J, T_{STG}	-55~150	℃

Note:
1. Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.3" x 0.3"(8mm x 8mm) copper pad areas.

CHARACTERISTIC CURVES

FIG1: Io-TL Curve

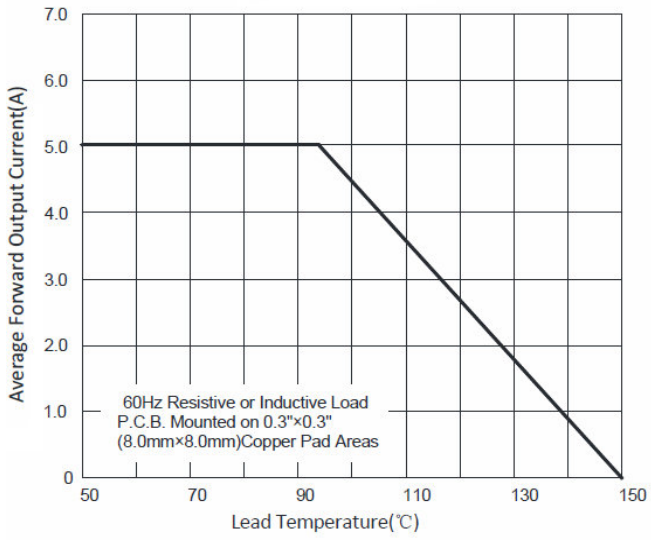


FIG2: Surge Forward Current Capability

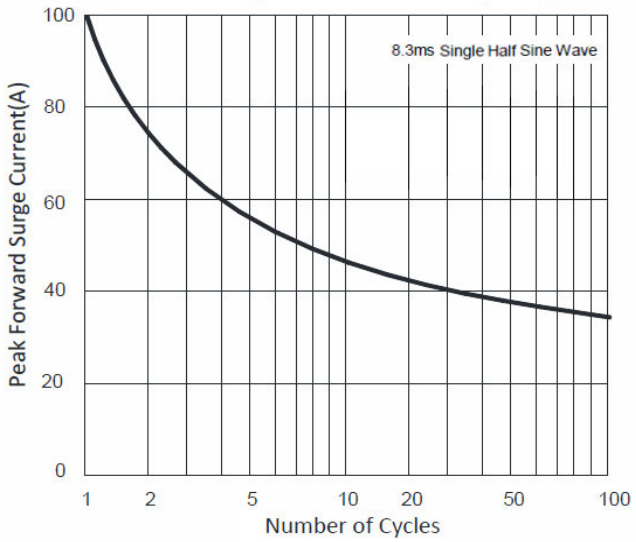


FIG3: Forward Voltage

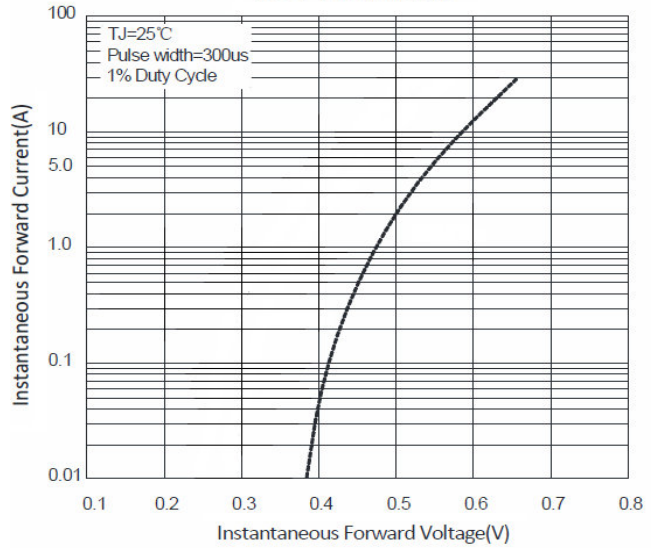


FIG4: Typical Reverse Characteristics