

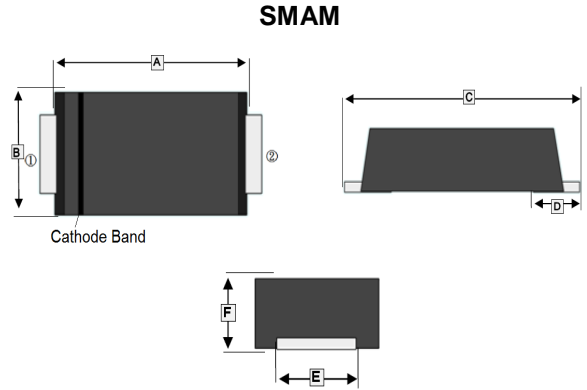
RoHS Compliant Product  
A suffix of "-C" specifies halogen & lead-free

## FEATURES

- Metal silicon junction, majority carrier conduction
- For surface mounted applications
- Low power loss, high efficiency
- High forward surge current capability
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications

## MECHANICAL DATA

- Case Material: SMAM
- Terminals: Solderable per MIL-STD-750, Method 2026
- Polarity: Cathode Band



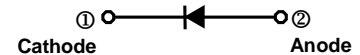
## MARKING

SL510

REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	3.20	3.70	D	1 TYP.	
B	2.40	2.80	E	1.30	1.60
C	4.40	4.90	F	0.90	1.25

## PACKAGE INFORMATION

Package	MPQ	Leader Size
SMAM	3K	7 inch



## ORDER INFORMATION

Part Number	Type
SK5100AM-C	Lead (Pb)-free and Halogen-free

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Rating 25°C ambient temperature unless otherwise specified. Single phase half wave, 60Hz, resistive or inductive load.  
For capacitive load, de-rate current by 20%.)

Parameter	Symbol	Ratings	Unit
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	100	V
Maximum RMS Voltage	$V_{RMS}$	70	V
Maximum DC Blocking Voltage	$V_{DC}$	100	V
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 @5A	$V_F$	0.6	V
Maximum DC Reverse Current @DC Blocking Voltage	$I_R$	$T_A=25^\circ\text{C}$	1
		$T_A=100^\circ\text{C}$	50
Typical Junction Capacitance <sup>1</sup>	$C_J$	280	pF
Typical Thermal Resistance <sup>2</sup>	$R_{\theta JL}$	22	°C/W
Operating Junction and Storage Temperature Range	$T_J, T_{STG}$	-55~150	°C

Notes:

1. Measured at 1 MHz and applied reverse voltage of 4V D.C.
2. P.C.B. mounted with 2.0" X 2.0" (5 X 5cm) copper pad areas.

**RATINGS AND CHARACTERISTIC CURVES**

Fig.1 Forward Current Derating Curve

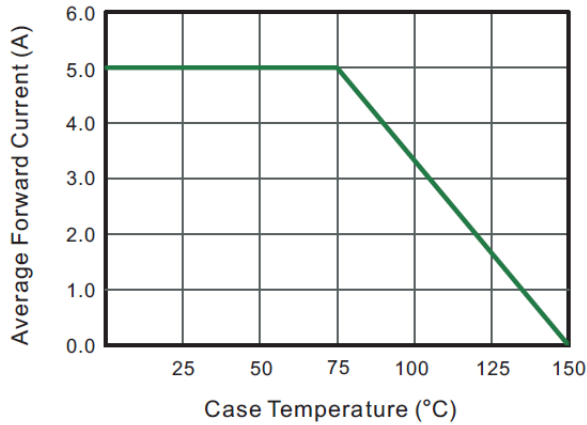


Fig.2 Typical Reverse Characteristics

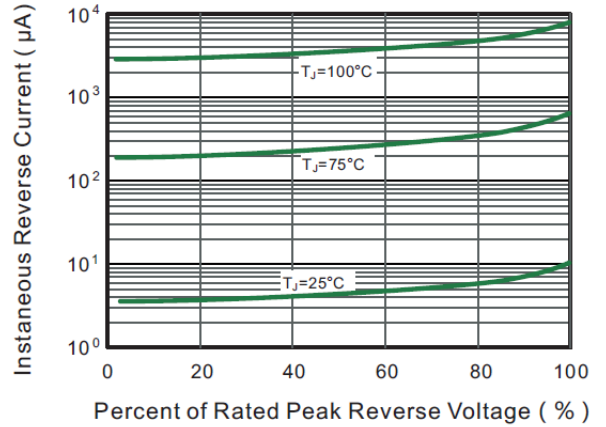


Fig.3 Typical Forward Characteristic

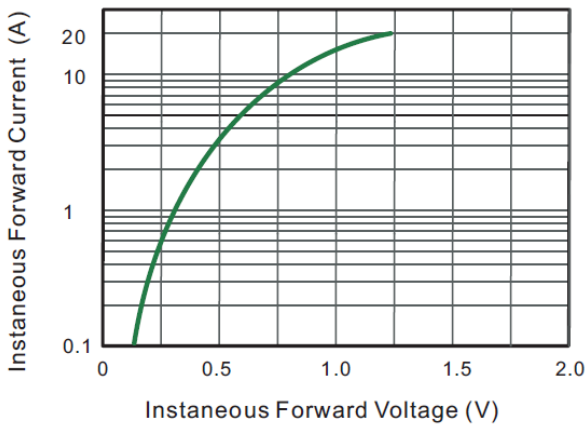


Fig.4 Typical Junction Capacitance

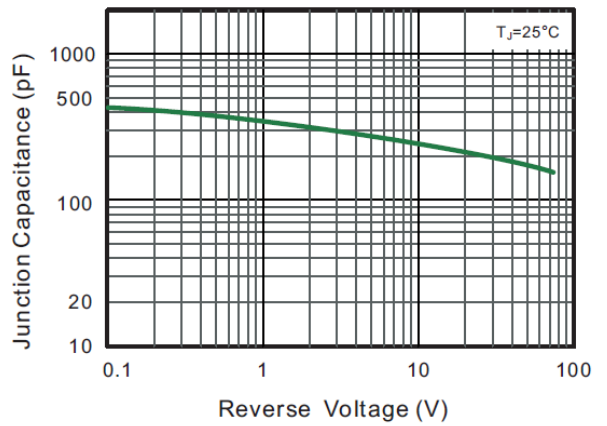


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

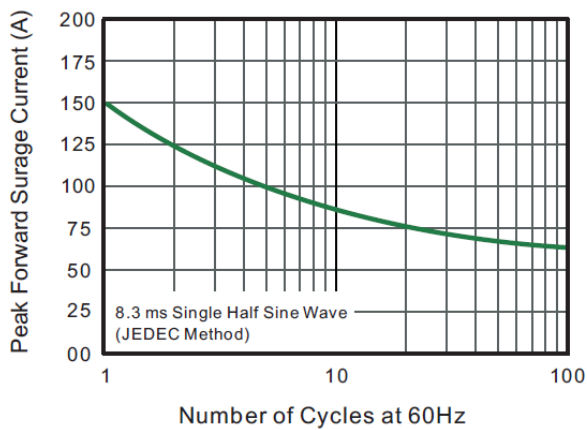


Fig.6- Typical Transient Thermal Impedance

