

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: SMAM
- Terminals: Solderable per MIL-STD-750, Method 2026

MARKING

SL545

PACKAGE INFORMATION

| Package | MPQ | Leader Size |
|---------|-----|-------------|
| SMAM | 3K | 7 inch |

ORDER INFORMATION

| Part Number | Type |
|-------------|---------------------------------|
| SK545AM-C | Lead (Pb)-free and Halogen-free |

ABSOLUTE MAXIMUM RATINGS

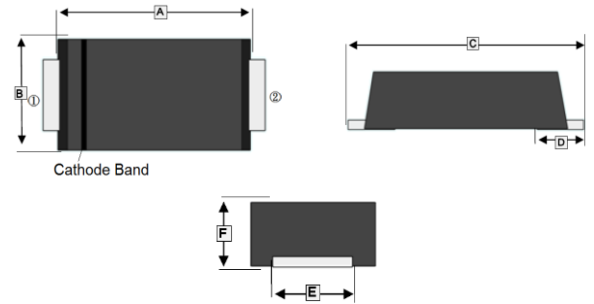
(Rating 25°C ambient temperature unless otherwise specified. Single phase half wave, 60Hz, resistive or inductive load. For capacitive load, de-rate current by 20%.)

| Parameter | Symbol | Rating | Unit |
|--|-----------------|---------|------|
| Maximum Repetitive Peak Reverse Voltage | V_{RRM} | 45 | V |
| Maximum RMS Voltage | V_{RMS} | 32 | V |
| Maximum DC Blocking Voltage | V_{DC} | 45 | 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 @ $I_F=5A$ | V_F | 0.45 | V |
| Maximum DC Reverse Current at Rated DC Blocking Voltage | I_R | 0.5 | mA |
| Typical Junction Capacitance ¹ | C_J | 700 | pF |
| Typical Thermal Resistance ² | $R_{\theta JL}$ | 22 | °C/W |
| Operating Temperature Range | T_J | -55~125 | °C |
| Storage Temperature Range | T_{STG} | -55~150 | |

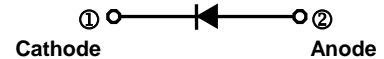
Notes:

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

SMAM



| 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 | 1.20 |



RATINGS AND CHARACTERISTIC CURVES

Fig.1 Forward Current Derating Curve

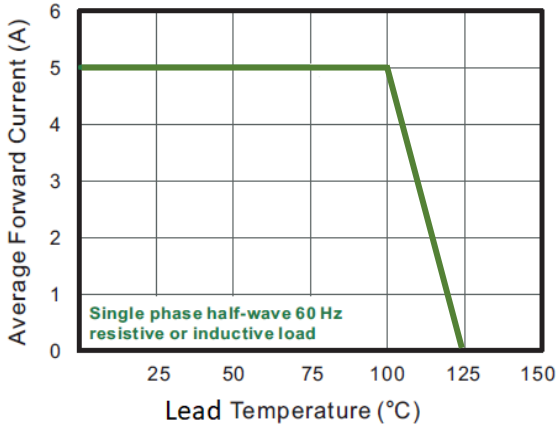


Fig.2 Typical Reverse Characteristics

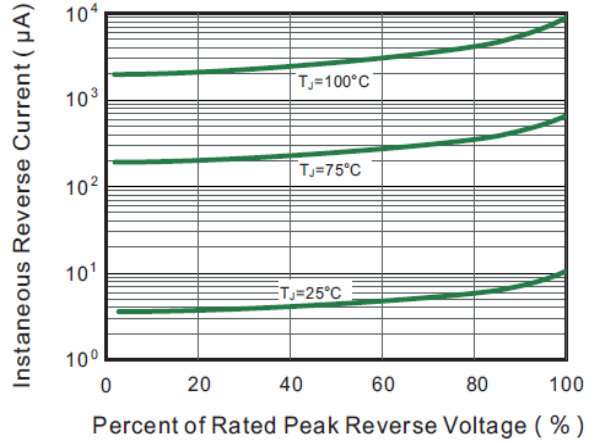


Fig.3 Typical Forward Characteristic

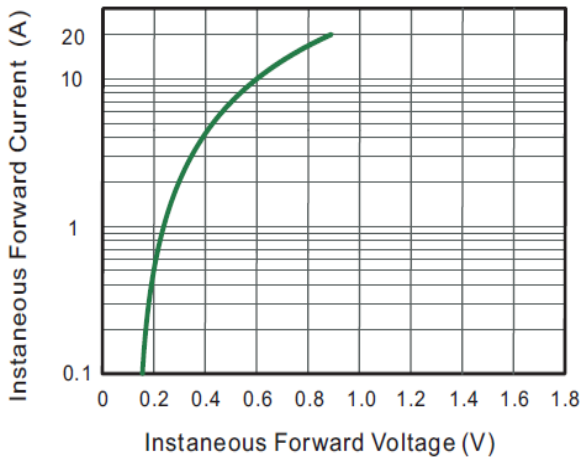


Fig.4 Typical Junction Capacitance

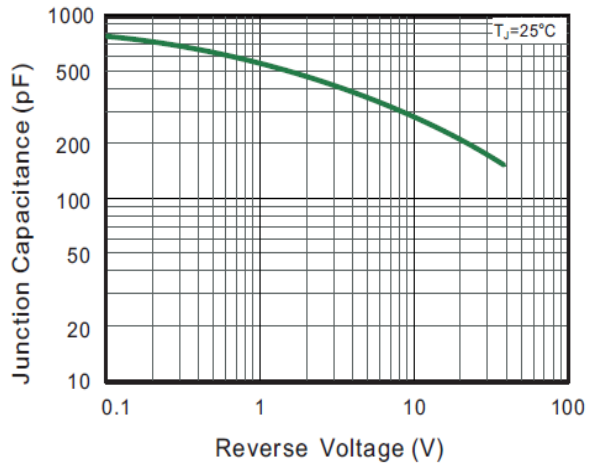


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

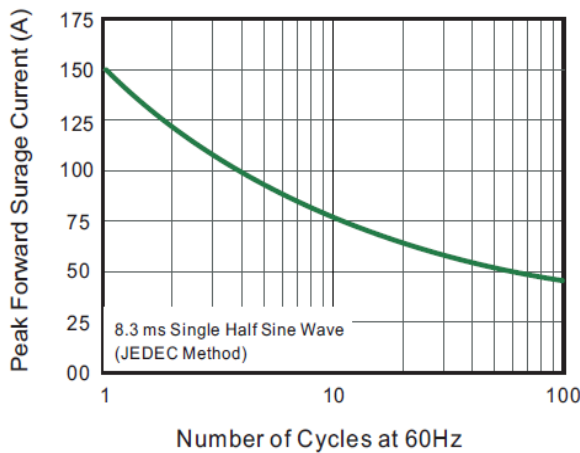
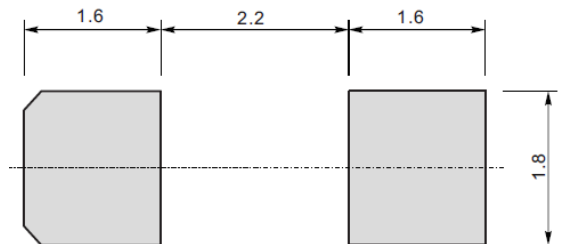


Fig.6 Mounting Pad Layout



*Dimensions in millimeters