

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

FEATURES

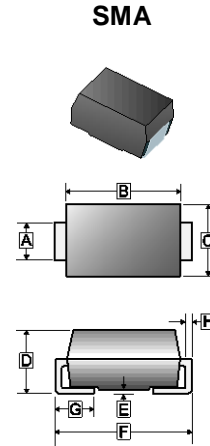
- Low Profile Package
- Ideal for Automated Placement
- Glass Passivated Chip Junction
- High Forward Surge Capability
- Super Fast Reverse Recovery Time
- Meets MSL Level 1, per J-STD-020, LF Maximum Peak of 260°C

MECHANICAL DATA

- Epoxy: UL94V-0 Rate Flame Retardant
- Terminals: Tin Plated Leads, Solderable per J-STD-002 and JESD22-B102
- Polarity: Color Band Denotes Cathode
- Mounting Position: Any

PACKAGE INFORMATION

| Package | MPQ | Leader Size |
|---------|-----|-------------|
| SMA | 5K | 13 inch |



| REF. | Millimeter | | REF. | Millimeter | |
|------|------------|------|------|------------|------|
| | Min. | Max. | | Min. | Max. |
| A | 1.23 | 1.65 | E | - | 0.3 |
| B | 3.99 | 4.75 | F | 4.70 | 5.28 |
| C | 2.30 | 2.90 | G | 0.75 | 1.52 |
| D | 1.90 | 2.62 | H | 0.15 | 0.31 |

ORDER INFORMATION

| Part Number | Type |
|---------------------|---------------------------------|
| SUF201A-C~SUF205A-C | Lead (Pb)-free and Halogen-free |

Cathode  Anode

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 | Part Number | | | | | Unit |
|--|-------------------|-------------|------------|------------|------------|------------|---------|
| | | SUF 201A-C | SUF 202A-C | SUF 203A-C | SUF 204A-C | SUF 205A-C | |
| Repetitive Peak Reverse Voltage | V_{RRM} | 50 | 100 | 200 | 400 | 600 | V |
| Maximum RMS Voltage | V_{RMS} | 35 | 70 | 140 | 280 | 420 | |
| Maximum DC Blocking Voltage | V_{DC} | 50 | 100 | 200 | 400 | 600 | |
| Average Rectified Output Current @60Hz sine wave, Resistance load | I_o | 2 | | | | | A |
| Surge (Non-repetitive) Forward Current @60Hz half-sine wave | I_{FSM} | 50 | | | | | A |
| Maximum Instantaneous Forward Voltage @ $I_F=2A$ | V_F | 0.98 | | 1.3 | 1.7 | V | |
| Maximum DC Reverse Current @Rated DC Blocking Voltage | $T_A=25^\circ C$ | 5 | | | | | μA |
| | $T_A=125^\circ C$ | 100 | | | | | |
| Maximum Reverse Recovery Time ¹ | T_{RR} | 35 | | | | | nS |
| Typical Thermal Resistance ² | $R_{\theta JA}$ | 65 | | | | | °C/W |
| | $R_{\theta JL}$ | 20 | | | | | |
| Operating & Storage Temperature Range | T_J, T_{STG} | -55~150 | | | | | °C |

Notes:

1. Measured with $I_F=0.5A$, $I_R=1A$, $I_{RR}=0.25A$.
2. Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.2" x 0.2" (5mm x 5mm) copper pad areas.

RATINGS AND CHARACTERISTIC CURVES

FIG.1: I_o-TL Curve

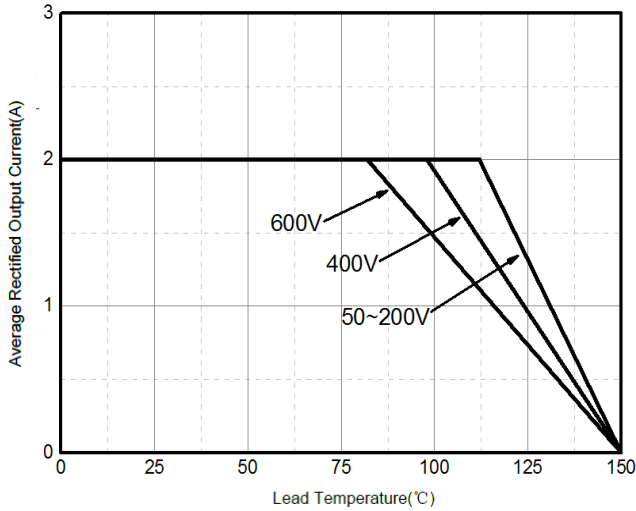


FIG2: Surge Forward Current Capability

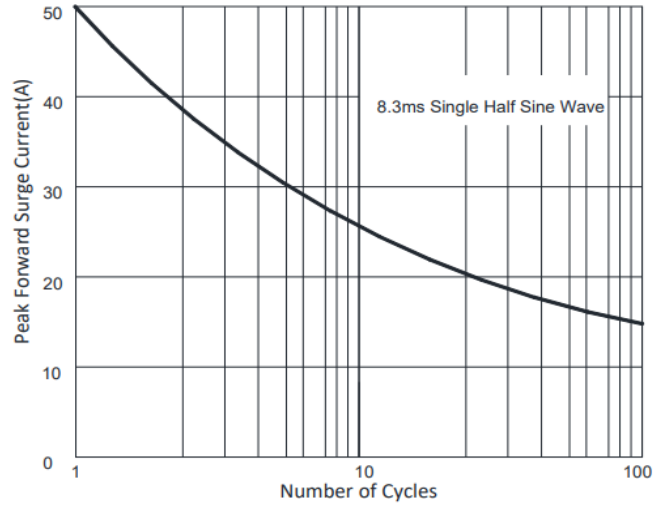


FIG3: Typical Forward Voltage

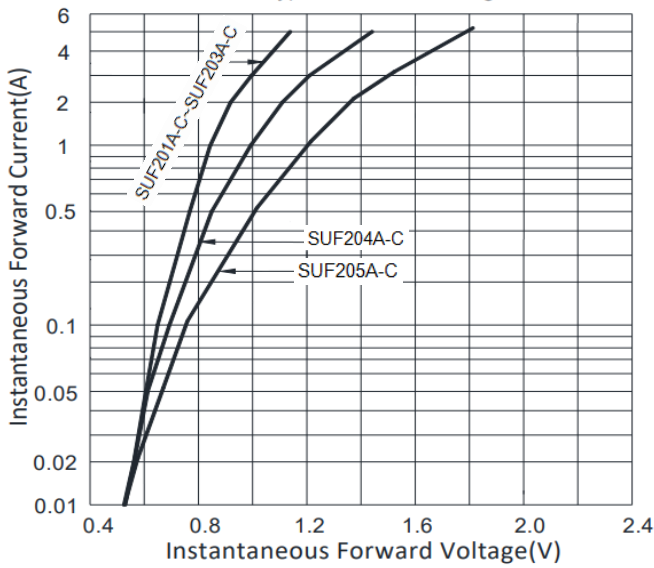


FIG4: Typical Reverse Characteristics

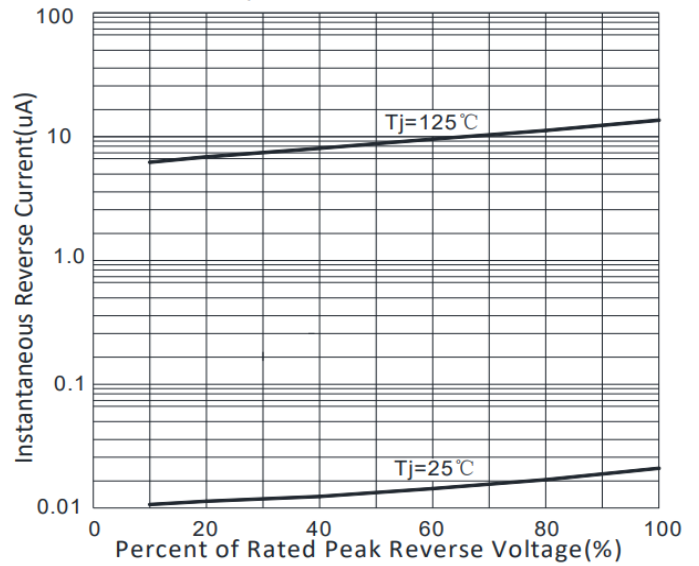


FIG5: Mounting Pad Layout

