



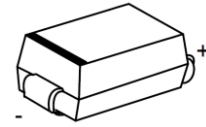
SSCFUS3ADB THRU SSCFUS3MDB

3.0Amp Ultra Fast Recovery Surface Mounted Rectifiers

● Features

- ✧ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ✧ Construction utilizes void-free molded plastic technique
- ✧ Low reverse leakage
- ✧ High forward surge current capability
- ✧ High temperature soldering guaranteed 260°C/10 seconds at terminals

● PIN configuration



SMB/DO-214AA



Circuit Diagram

● Mechanical Data

- ✧ Case: Molded plastic body
- ✧ Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- ✧ Polarity: Polarity symbol marking on body
- ✧ Mounting Position: Any



Marking

(US3D: SSCFUS3DDB Marking Code)

● Absolute Maximum Rating @T_A=25°C

| Parameter | Symbol | SSCFUS3 | | | | | | | Unit |
|--|-----------------------------------|------------|-----|-----|-----|-----|-----|------|------|
| | | ADB | BDB | DDB | GDB | JDB | KDB | MDB | |
| Maximum Peak Repetitive Peak Reverse Voltage | V _{RRM} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum RMS Voltage | V _{RMS} | 35 | 70 | 140 | 280 | 420 | 560 | 700 | V |
| Maximum DC Blocking Voltage | V _{DC} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum Average Forward Rectified Current | I _{F(AV)} | 3.0 | | | | | | | A |
| Non-repetitive Peak Forward Surge Current @t=8.3ms | I _{FSM} | 100.0 | | | | | | | A |
| Max Instantaneous Forward Voltage at 1.0A | V _F | 1.0 | | | 1.4 | 1.7 | | | V |
| Maximum DC Reverse Current T _a = 25 °C at Rated DC Blocking Voltage T _a =125 °C | I _R | | | | 2.0 | | | μA | |
| | | | | | 200 | | | | |
| Maximum Reverse Recovery Time (Note 1) | T _{rr} | 50 | | | | 75 | | | ns |
| Typical Junction Capacitance (Note 2) | C _J | 65.0 | | | | | | | pF |
| Typical Thermal Resistance | R _{qJA} | 60.0 | | | | | | | °C/W |
| Operating Temperature and Storage Temperature | T _J , T _{STG} | -55 ~ +150 | | | | | | | °C |

Note: 1. Reverse recovery time test condition: IF=0.5A IR=1.0A Irr=0.25A

2. Measured at 1MHz and applied reverse voltage of 4.0V DC.



- Typical Performance Characteristics

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

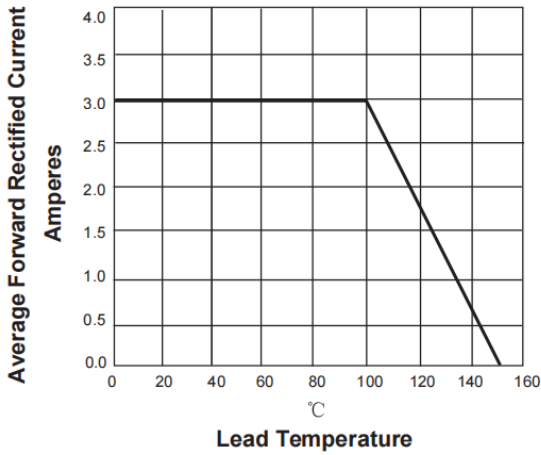


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

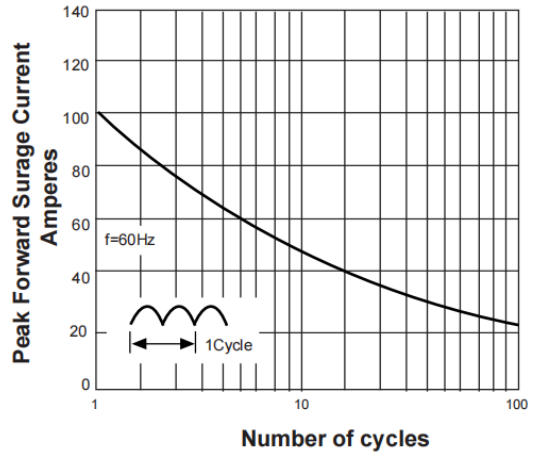


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

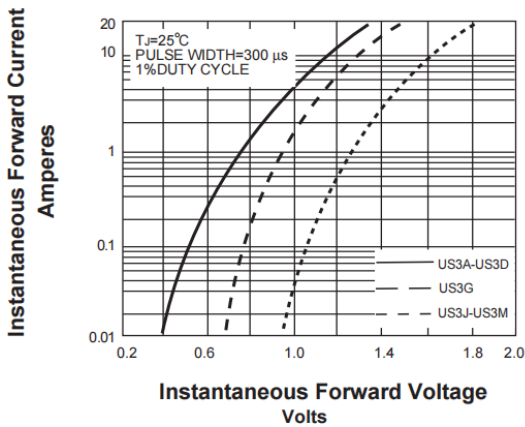
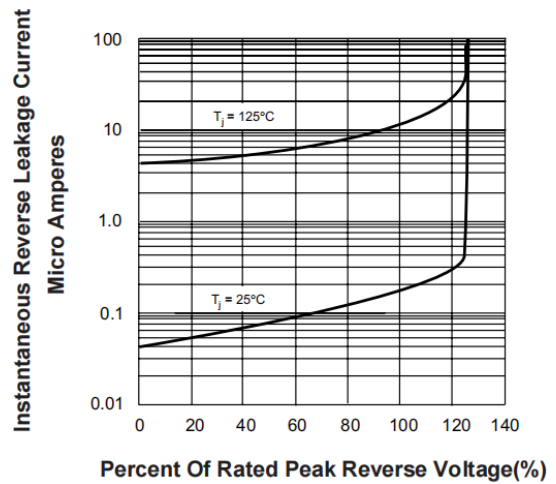


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS





● Package Information

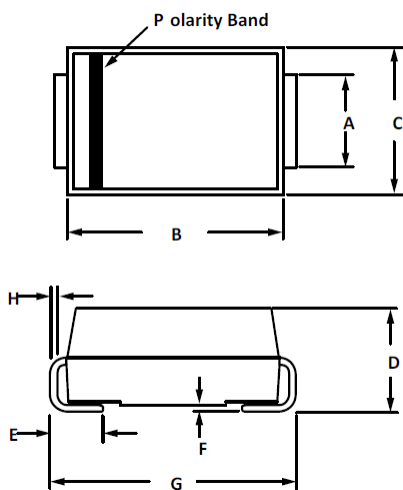
Ordering Information

| Device | Package | Marking | Qty per Reel | Reel Size |
|------------|--------------|---------|--------------|-----------|
| SSCFUS3ADB | SMB/DO-214AA | US3A | 3000 | 13 Inch |
| SSCFUS3BDB | SMB/DO-214AA | US3B | 3000 | 13 Inch |
| SSCFUS3DDB | SMB/DO-214AA | US3D | 3000 | 13 Inch |
| SSCFUS3GDB | SMB/DO-214AA | US3G | 3000 | 13 Inch |
| SSCFUS3JDB | SMB/DO-214AA | US3J | 3000 | 13 Inch |
| SSCFUS3KDB | SMB/DO-214AA | US3K | 3000 | 13 Inch |
| SSCFUS3MDB | SMB/DO-214AA | US3M | 3000 | 13 Inch |

Mechanical Data

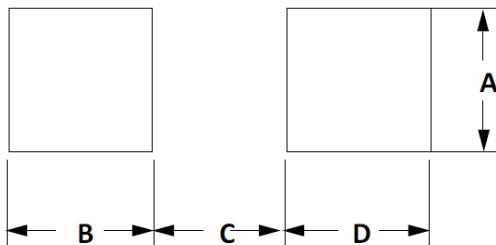
Case: SMB/DO-214AA

Case Material: Molded Plastic. UL Flammability



| DIM | Millimeters | |
|-----|-------------|------|
| | Min | Max |
| A | 1.90 | 2.1 |
| B | 4.22 | 4.70 |
| C | 3.40 | 3.94 |
| D | 2.00 | 2.50 |
| E | 0.90 | 1.42 |
| F | 0.00 | 0.23 |
| G | 5.21 | 5.59 |
| H | 0.15 | 0.31 |

Recommended Pad outline (Unit: mm)



| DIM | Millimeters | |
|-----|-------------|------|
| | Min | Max |
| A | 2.15 | - |
| B | 1.45 | - |
| C | - | 2.55 |
| D | 1.45 | - |



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