



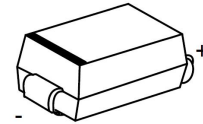
## SSCFUS3ADB THRU SSCFUS3MDB

### 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<sub>A</sub>=25°C

Parameter	Symbol	SSCFUS3							Unit
		ADB	BDB	DDB	GDB	JDB	KDB	MDB	
Maximum Peak Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current	I <sub>F(AV)</sub>	3.0							A
Non-repetitive Peak Forward Surge Current @t=8.3ms	I <sub>FSM</sub>	100.0							A
Max Instantaneous Forward Voltage at 1.0A	V <sub>F</sub>	1.0		1.4		1.7		V	
Maximum DC Reverse Current Ta = 25 °C at Rated DC Blocking Voltage Ta =100 °C	I <sub>R</sub>	5.0			500				µA
Maximum Reverse Recovery Time (Note 1)	T <sub>rr</sub>	50				75			ns
Typical Junction Capacitance (Note 2)	C <sub>J</sub>	65.0							pF
Typical Thermal Resistance	R <sub>qJA</sub>	85.0							°C/W
Operating Temperature and Storage Temperature	T <sub>J</sub> , T <sub>STG</sub>	-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

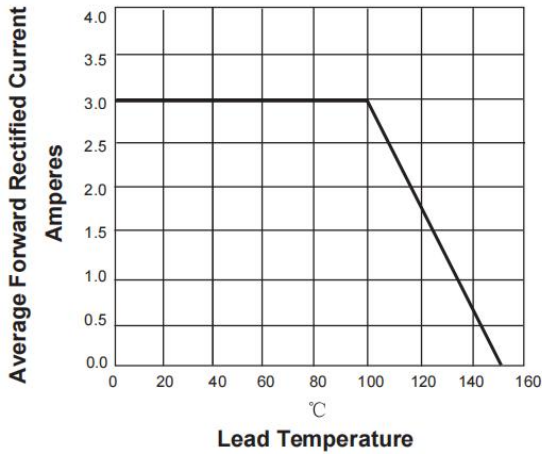


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

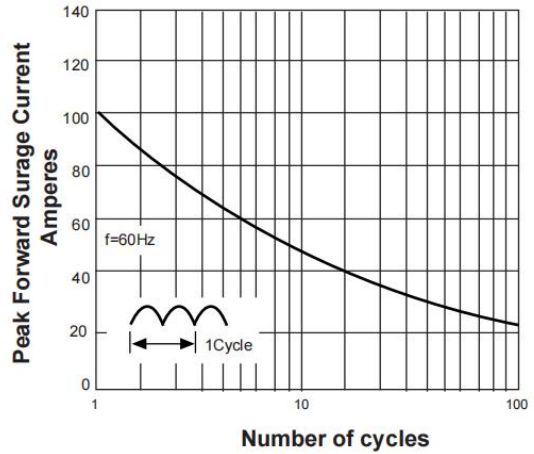


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

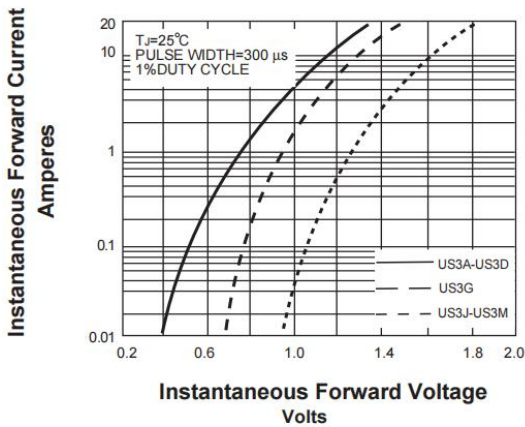
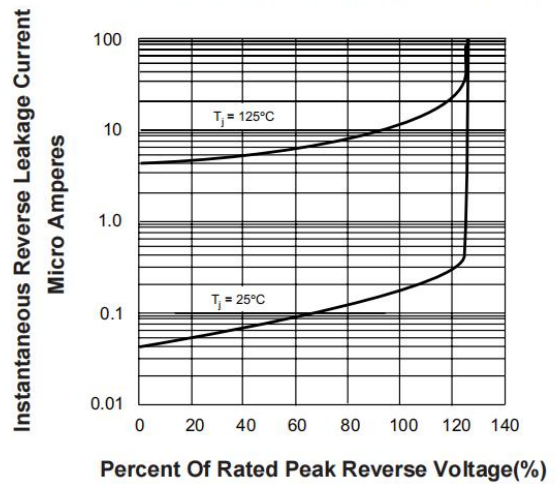


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS





## ● Package Information

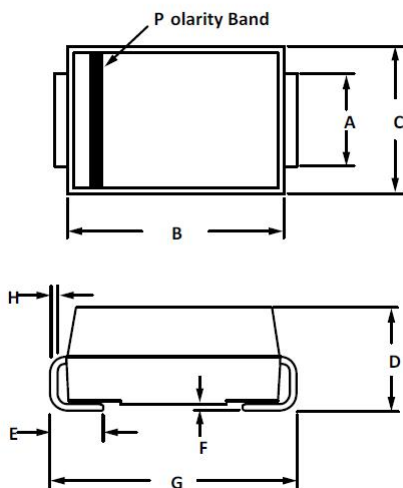
### Ordering Information

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

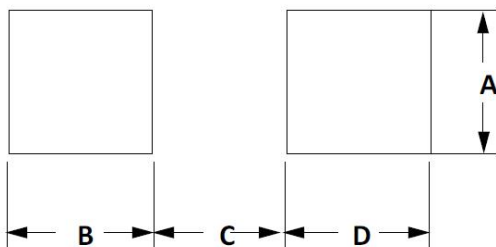
Case: SMB/DO-214AA

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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