



SSCRGS3ADB THRU SSCRGS3MDB

3.0Amp Standard Surface Mounted Rectifiers

● Features

- ✧ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ✧ Idea for printed circuit board
- ✧ Glass passivated Junction chip
- ✧ 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

(GS5J: SSCRGS3JDB Marking Code)

● Absolute maximum rating ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

Parameter	Symbol	SSCRGS3							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 3.0A	V_F	1.10							V
Maximum DC Reverse Current $T_a = 25^{\circ}\text{C}$ at Rated DC Blocking Voltage $T_a = 100^{\circ}\text{C}$	I_R	5.0 500							μA
Typical Junction Capacitance (Note1)	C_J	40.0							pF
Typical Thermal Resistance	$R_{\theta JA}$	85.0							$^{\circ}\text{C/W}$
Operating Temperature	T_J	-55 ~ +150							$^{\circ}\text{C}$
Storage Temperature	T_{STG}	-55 ~ +150							$^{\circ}\text{C}$

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



- Typical Performance Characteristics ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

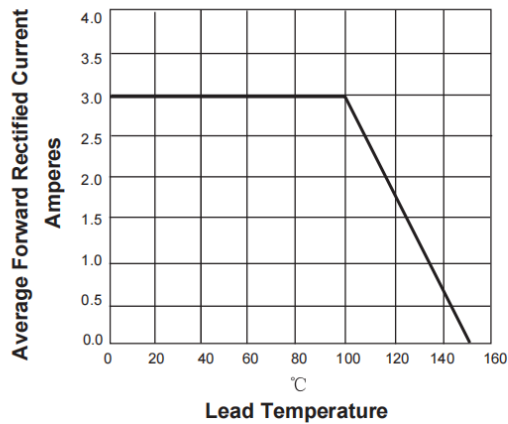


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

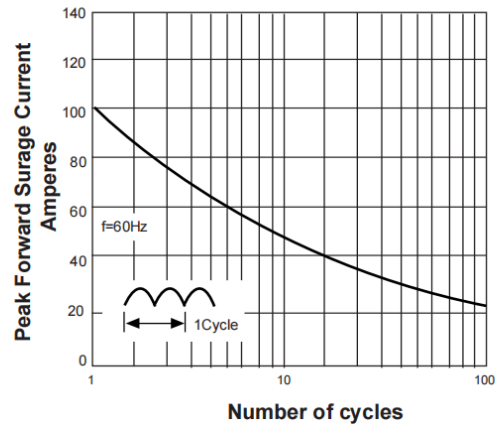


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

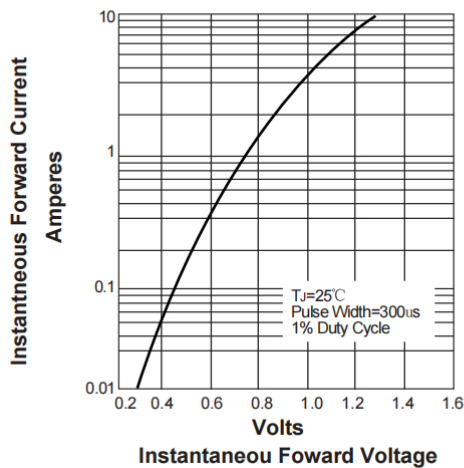
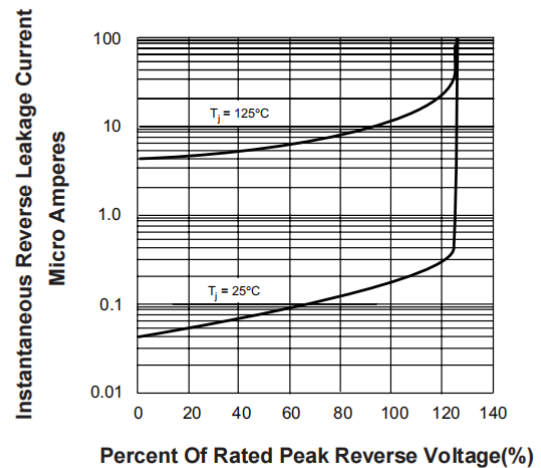


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS





● Package Information

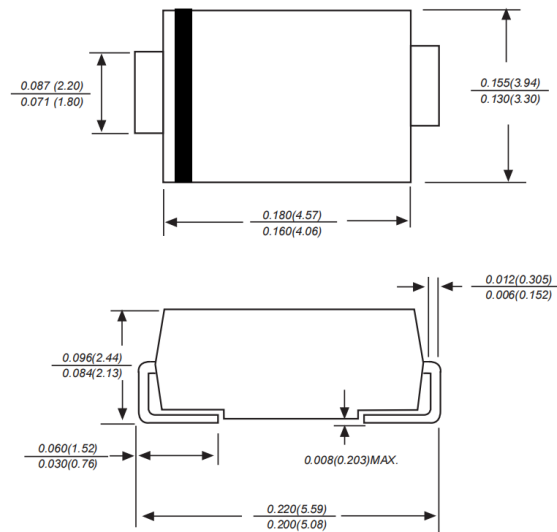
Ordering Information

Device	Package	Marking	Qty per Reel	Reel Size
SSCRGS3ADB	SMB/DO-214AA	GS3A	3000	13 Inch
SSCRGS3BDB	SMB/DO-214AA	GS3B	3000	13 Inch
SSCRGS3DDB	SMB/DO-214AA	GS3D	3000	13 Inch
SSCRGS3GDB	SMB/DO-214AA	GS3G	3000	13 Inch
SSCRGS3JDB	SMB/DO-214AA	GS3J	3000	13 Inch
SSCRGS3KDB	SMB/DO-214AA	GS3K	3000	13 Inch
SSCRGS3MDB	SMB/DO-214AA	GS3M	3000	13 Inch

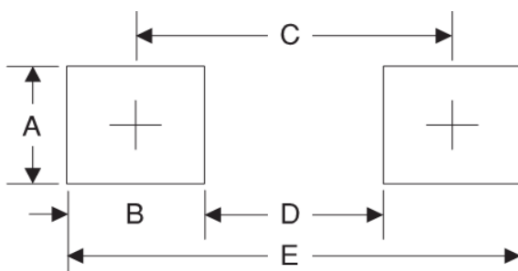
Mechanical Data

Case: SMB/DO-214AA

Case Material: Molded Plastic. UL Flammability



Recommended Pad outline (Unit: mm)



Symbol	Unit (mm)	Unit (inch)
A	2.30	0.091
B	2.00	0.078
C	4.10	0.161
D	2.10	0.083
E	6.10	0.240



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