



SOLID STATE DEVICES, INC.

14830 Valley View Blvd * La Mirada, Ca 90638

Phone: (562) 404-7855 * Fax: (562) 404-1773

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Designer's Data Sheet

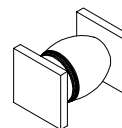
FEATURES:

- Ultra Fast Recovery: 60 nsec Maximum
- PIV to 3 500 Volts
- Hermetically Sealed
- Void-Free Construction
- Metallurgically Bonded
- 175°C Maximum Operating Temperature
- TX, TXV, and Space Level Screening Available

SGB10UFSMS thru SGB35UFSMS

**60 mAMPS
1000 - 3500 VOLTS
60 nsec
HIGH VOLTAGE
RECTIFIER**

**SURFACE MOUNT
SQUARE TAB**



ELECTRICAL CHARACTERISTICS

Part Number	Peak Inverse Voltage	Average Rectified Current		Maximum Reverse Current		Maximum Forward Voltage	Maximum Surge Current (1 Cycle)	Maximum Reverse Recovery Time	Maximum Junction Capacitance	Typical Thermal Impedance
Symbol	PIV	I_0		$I_R @ PIV$		$V_F^{2/}$	I_{FSM}	$t_{RR}^{5/}$	C_J	θ_{JE}
Units	Volts	mA		μA		Volts	Amps	nsec	pF	°C/W
Conditions		25°C	100°C	25°C	100°C	25°C	25°C	25°C	$V_R = 100V$ $f_T = 1MHz$	
SGB10UFSMS	1000	60	50	0.1	10	9	5	60	1.0	165
SGB15UFSMS	1500	60	50	0.1	10	9	5	60	1.0	165
SGB20UFSMS	2000	60	50	0.1	10	9	5	60	1.0	165
SGB25UFSMS	2500	60	50	0.1	10	9	5	60	1.0	165
SGB30UFSMS	3000	60	50	0.1	10	9	5	60	1.0	165
SGB35UFSMS	3500	60	50	0.1	10	9	5	60	1.0	165

NOTE: All specifications are subject to change without notification. SCD's for these devices should be reviewed by SSDI prior to release.

DATA SHEET # : RV0005C

**SGB10UFSMS
thru
SGB35UFSMS**



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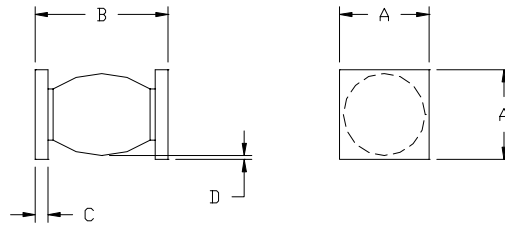
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PACKAGE OUTLINE: SMS

DIMENSIONS

DIM	MIN	MAX
A	.090"	.100"
B	.150"	.210"
C	.022"	.028"
D	.002"	--

Dimensions are prior to soldering.



NOTES:

1. Operating and testing over 10,000 V/inch may require encapsulation or immersion in suitable dielectric material.
2. $I_F = I_0$; Maximum forward voltage measured with instantaneous forward pulse of 300 μ sec minimum.
3. Maximum lead temperature for soldering is 250°C, 3/8" from case for 5 sec maximum.
4. Operating and Storage temperature: -65 to +175°C.
5. Reverse Recovery Test Conditions: $I_F = 50\text{mA}$, $I_R = 100\text{mA}$, $I_{RR} = 25\text{mA}$, $T_A = 25^\circ\text{C}$.
6. Consult manufacturing for operating curves.