



SOLID STATE DEVICES, INC.

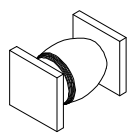
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Designer's Data Sheet

**SGB10UFSMS
 thru
 SGB35UFSMS**

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

**SURFACE MOUNT
 SQUARE TAB**



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

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
		I_0		I_R @ PIV						
Symbol	PIV	I_0		I_R @ PIV		V_F ^{2/}	I_{FSM}	t_{RR} ^{5/}	C_J	θ_{JE}
Units	Volts	mA		mA		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	5	60	1.0	165
SGB15UFSMS	1500	60	50	0.1	10	9.5	5	60	1.0	165
SGB20UFSMS	2000	60	50	0.1	10	9.5	5	60	1.0	165
SGB25UFSMS	2500	60	50	0.1	10	9.5	5	60	1.0	165
SGB30UFSMS	3000	60	50	0.1	10	9.5	5	60	1.0	165
SGB35UFSMS	3500	60	50	0.1	10	9.5	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 # : RV0005D

**SGB10UFSMS
thru
SGB35UFSMS**



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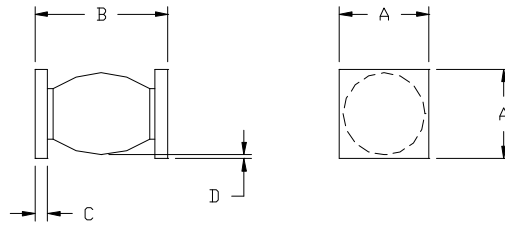
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PACKAGE OUTLINE: SMS

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.