



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

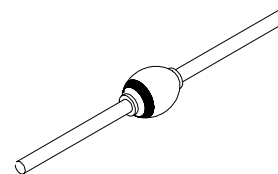
FEATURES:

- 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

**SGB10UF
thru
SGB35UF**

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

AXIAL



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_{JL}
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	$V_R = 100V$ $f_T = 1MHz$	$L = 1/4"$
SGB10UF	1000	60	45	0.1	10	9	5	60	1.0	185
SGB15UF	1500	60	45	0.1	10	9	5	60	1.0	185
SGB20UF	2000	60	45	0.1	10	9	5	60	1.0	185
SGB25UF	2500	60	45	0.1	10	9	5	60	1.0	185
SGB30UF	3000	60	45	0.1	10	9	5	60	1.0	185
SGB35UF	3500	60	45	0.1	10	9	5	60	1.0	185

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

DATA SHEET # : RV0003B

**SGB10UF
thru
SGB35UF**

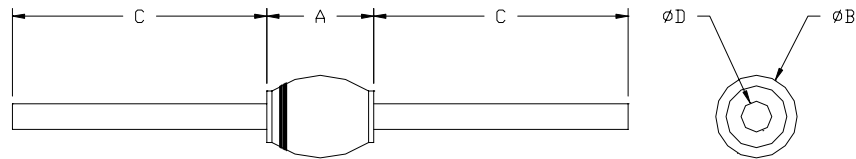


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**PACKAGE OUTLINE:
AXIAL RECTIFIER**

DIMENSIONS		
DIM	MIN	MAX
A	--	.150"
B	--	.080"
C	1.00"	--
D	.022"	.028"



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.