



**Solid State Devices, Inc.**

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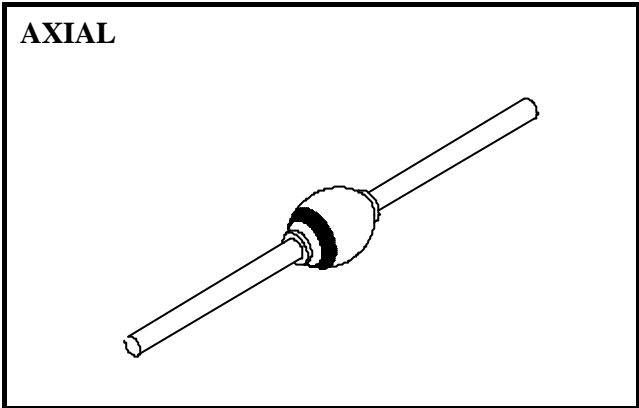
**SGB10UF  
and  
SGB35UF**

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

**Designer's Data Sheet**

**FEATURES:**

- Ultra Fast Recovery: 60nsec Maximum
- PIV to 3500 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 Rectifier Current		Maximum Reverse Current		Maximum m Forward Voltage	Maximum Surge Current (1 Cycle)	Maximum Reverse Recovery Time	Maximum Junction Capacitance	Typical Thermal Impedance
		25°C	100°C	25°C	100°C					
Symbol	PIV	I <sub>0</sub>		IR @ PIV		V <sub>F</sub> 2/	I <sub>FSM</sub>	t <sub>RR</sub> 5/	C <sub>J</sub>	q <sub>JL</sub>
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 <sub>R</sub> = 100V f <sub>T</sub> = 1MHZ	L = 1/4"
SGB10UF	1000	60	45	0.1	10	9.5	5	60	1.0	185
SGB15UF	1500	60	45	0.1	10	9.5	5	60	1.0	185
SGB20UF	2000	60	45	0.1	10	9.5	5	60	1.0	185
SGB25UF	2500	60	45	0.1	10	9.5	5	60	1.0	185
SGB30UF	3000	60	45	0.1	10	9.5	5	60	1.0	185
SGB35UF	3500	60	45	0.1	10	9.5	5	60	1.0	185



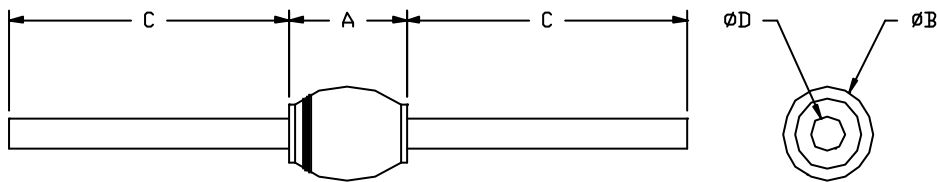
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**SGB10UF  
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**PACKAGE OUTLINE: AXIAL RECTIFIER**

DIMENSIONS		
DIM	MIN	MAX
A	--	.150"
B	--	.090"
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.  $I_F = I_Q$ ; Maximum forward voltage measured with instantaneous forward pulse of 300msec 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.

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

**DATA SHEET #: RV0003E**

**DOC**