



**Solid State Devices, Inc.**

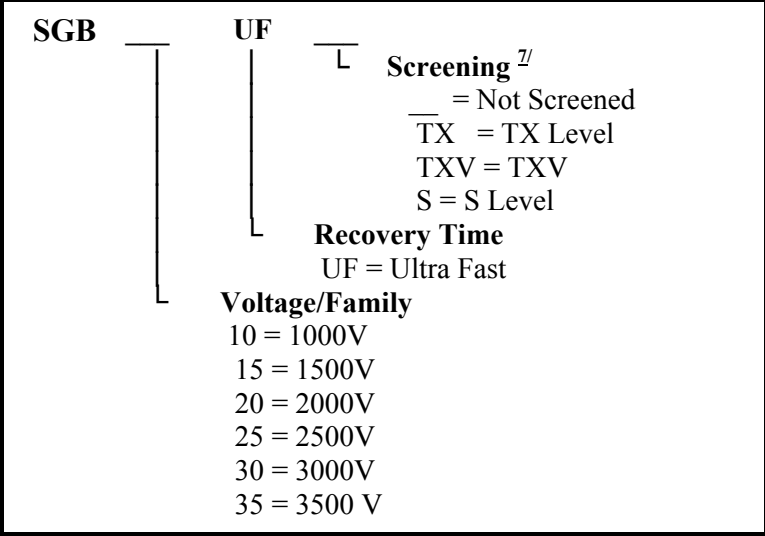
14701 Firestone Blvd \* La Mirada, Ca 90638  
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**SGB10UF  
and  
SGB35UF**

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

- 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<sup>7/</sup>

**Designer's Data Sheet**



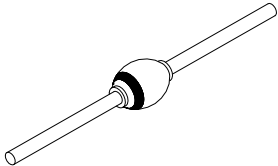
**ELECTRICAL CHARACTERISTICS**

Part Number	Peak Inverse Voltage	Average Rectifier Current		Maximum Reverse Current		Maximum Forward Voltage	Maximum Surge Current (1 Cycle)	Maximum Reverse Recovery Time	Maximum Junction Capacitance	Typical Thermal Impedance
		I <sub>0</sub>	I <sub>0</sub>	IR @ PIV	IR @ PIV					
Symbol	PIV	I <sub>0</sub>		IR @ PIV		V <sub>F</sub> <sup>2/</sup>	I <sub>FSM</sub>	t <sub>RR</sub> <sup>5/</sup>	C <sub>J</sub>	θ <sub>JL</sub>
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 <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

**NOTES:**

1. Operating and testing over 10,000 V/inch may require encapsulation or immersion in suitable dielectric material.
2. I<sub>F</sub> = I<sub>0</sub>; 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<sub>F</sub> = 50mA, I<sub>R</sub> = 100mA, I<sub>RR</sub> = 25mA, T<sub>A</sub> = 25°C.
6. Consult manufacturing for operating curves.
7. Screening based on MIL-PRF-19500. Screening flows available on request.

Axial





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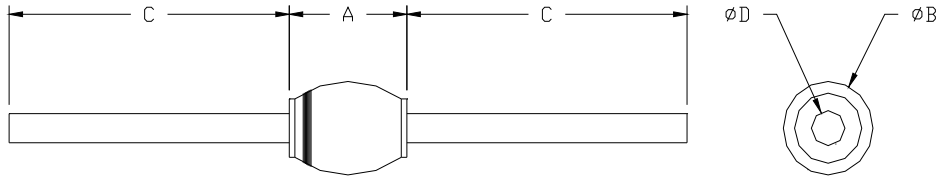
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SGB35UF**

**PACKAGE OUTLINE: AXIAL RECTIFIER**

**DIMENSIONS**

DIM	MIN	MAX
A	--	.150"
B	--	.090"
C	1.00"	--
D	.022"	.028"



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

**DATA SHEET #: RV0003F**

**DOC**