



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

SGB **UF** **Screening** ^{7/}
 — = Not Screened
 TX = TX Level
 TXV = TXV
 S = S Level

Recovery Time
 UF = Ultra Fast

Voltage/Family
 10 = 1000V
 15 = 1500V
 20 = 2000V
 25 = 2500V
 30 = 3000V
 35 = 3500 V

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^{7/}

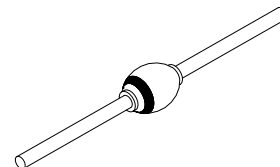
ELECTRICAL CHARACTERISTICS

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
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	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_F = I₀; 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 = 50mA, I_R = 100mA, I_{RR} = 25mA, T_A = 25°C.
6. Consult manufacturing for operating curves.
7. Screening based on MIL-PRF-19500. Screening flows available on request.

Axial



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

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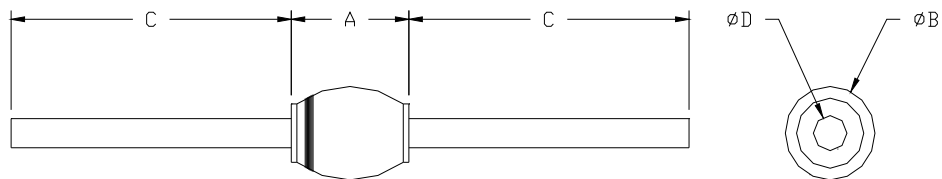
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**SGB10UF
and
SGB35UF**

PACKAGE OUTLINE: AXIAL RECTIFIER

DIMENSIONS

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



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