

35A High Current Glass Passivated Single Phase

Voltage - 800 to 1600 V

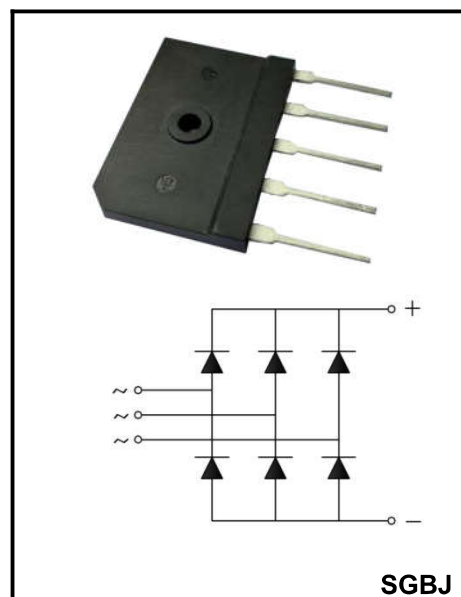
Forward Current – 35A

FEATURES

- ◆Glass passivated chip
- ◆Low reverse leakage current
- ◆High surge current capability
- ◆Compliant to RoHS directive 2011/65/EU

MECHANICAL DATA

- ◆Case: SGBJ
- ◆Terminals: Solderable per MIL-STD-202, Method 208
- ◆Approx. Weight: About 10 grams



Maximum Ratings And Electrical Characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20 %.

Parameter		Symbols	SGBJ3508	SGBJ3510	SGBJ3512	SGBJ3516	Units
Maximum Repetitive Peak Reverse Voltage		V_{RRM}	800	1000	1200	1600	V
Average rectified output current	with heatsink, $T_c=85^{\circ}\text{C}$	$I_{(AV)}$	35				A
Peak surge forward current, 8.3ms single half sine-wave superimposed on rated load		I_{FSM}	450				A
Rating for fusing, $1\text{ms} < t < 8.3\text{ms}$, $T_j=25^{\circ}\text{C}$, Rating of per diode		I^2t	840				A^2S
Junction temperature and Storage temperature		T_j, T_{stg}	$-55 \sim +150$				$^{\circ}\text{C}$
Dielectric strength, terminals to case AC 1 minute		V_{DS}	2.5				KV
Peak Forward Voltage @ $I_F=17.5\text{A}$		V_F	1.1				V
Peak Reverse Current $V_R=V_{RRM}$, Pulse measurement Rating of per diode	$T_j=25^{\circ}\text{C}$ $T_j=125^{\circ}\text{C}$	I_R	5 500				μA
Junction to ambient thermal resistance, without heatsink		$R_{\theta JA}$	18				$^{\circ}\text{C/W}$
Junction to case thermal resistance, with heatsink		$R_{\theta JC}$	1.5				$^{\circ}\text{C/W}$

(1) Measured at 1 MHz and applied reverse voltage of 4 V D.C

(2) Device mounted on 75mm*75mm*1.6mm cu plate heatsink

RATINGS AND CHARACTERISTIC CURVES

Fig 1-forwardCurrent derating Curve

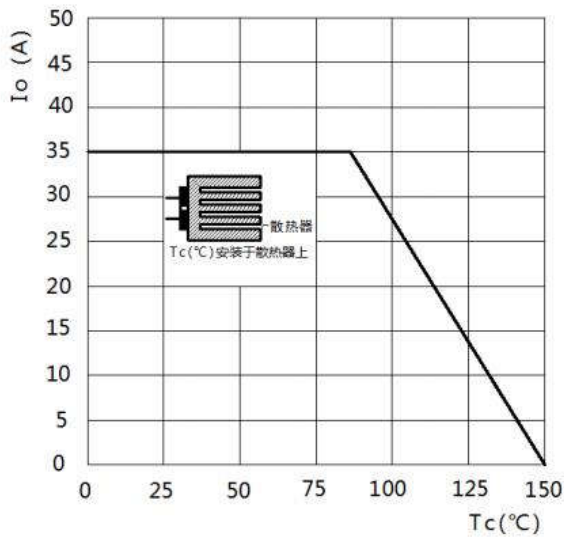


Fig.2-Maximum Non-Repetitive Surge Currnet

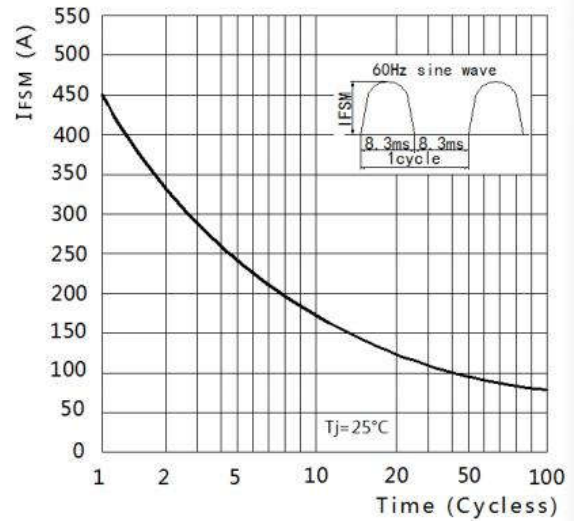


Fig.3-Typical Reverse Characteristics

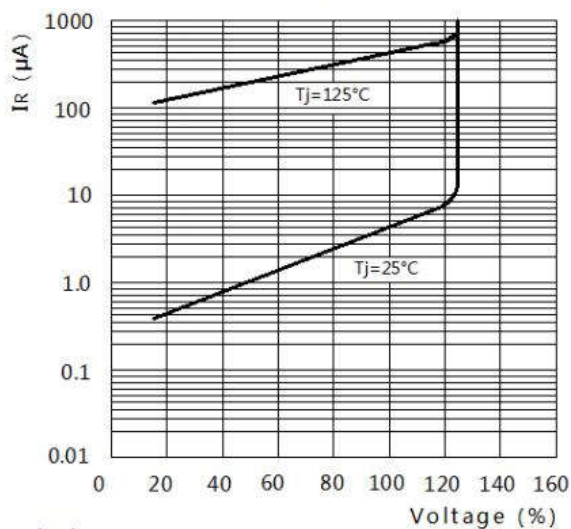
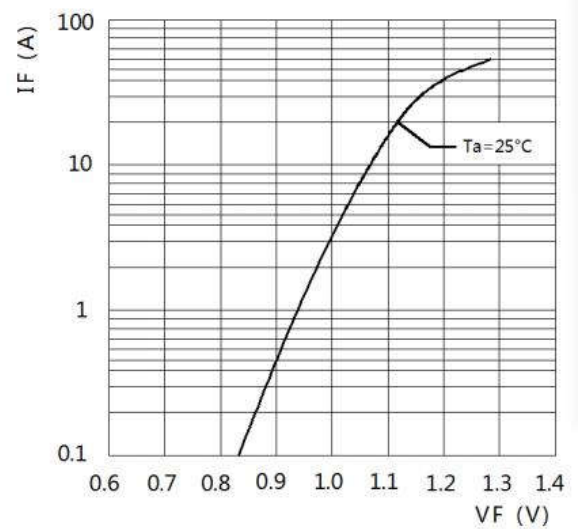
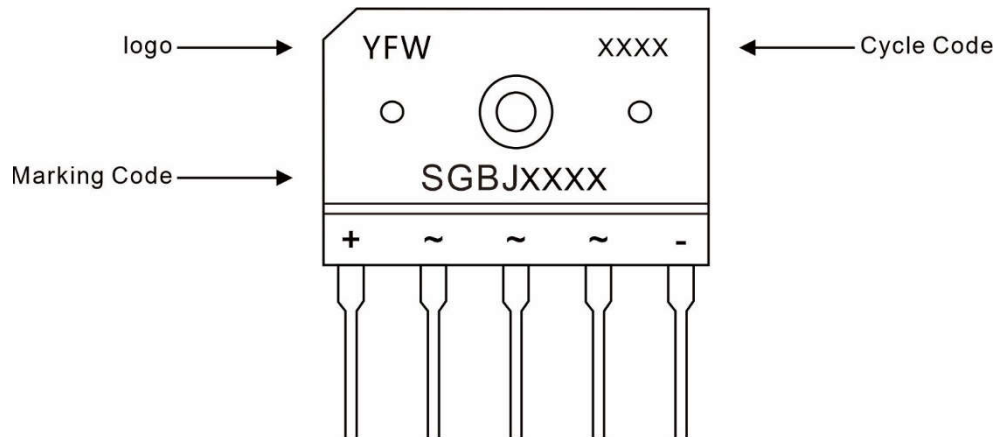


Fig.4-Typical Forwaed Characteristics



Marking Diagram



Ordering information

Package	Packing Description	Packing Quantity
SGBJ	bulk	200PCS/Box 2000PCS/Carton

Package Dimensions

SGBJ

Dim.	Millimeter(mm)		DimensionsinInch	
	Min.	Max.	Min.	Max.
A	34.50	35.50	1.36	1.40
B	24.50	25.50	0.96	1.00
C	2.90	3.50	0.11	0.14
D	16.60	17.60	0.65	0.69
E	3.70	4.30	0.15	0.17
F	2.20	2.80	0.09	0.11
G	2.00	2.60	0.08	0.10
H	0.90	1.10	0.04	0.04
I	7.20	7.80	0.28	0.31
J	4.30	4.90	0.17	0.19
K	3.40	4.00	0.13	0.16
L	0.20	0.80	0.01	0.03
M	13.80	14.40	0.54	0.57
N	2.50	2.90	0.10	0.11
O	0.55	0.75	0.02	0.03

Disclaimer

The information presented in this document is for reference only. Guangdong Youfeng Microelectronics Co.,Ltd. reserves the right to make changes without notice for the specification of the products displayed herein to improve reliability, function or design or otherwise. The product listed herein is designed to be used with ordinary electronic equipment or devices, and not designed to be used with equipment or devices which require high level of reliability and the malfunction of which would directly endanger human life (such as medical instruments, transportation equipment, aerospace machinery, nuclear-reactor controllers, fuel controllers and other safety devices), YFW or anyone on its behalf, assumes no responsibility or liability for any damages resulting from such improper use of sale. This publication supersedes & replaces all information previously supplied. For additional information, please visit our website <https://www.yfwdiode.com>, or consult YFW sales office for further assistance.