

35A High Current Glass Passivated Single Phase

Voltage - 800 to 1600 V

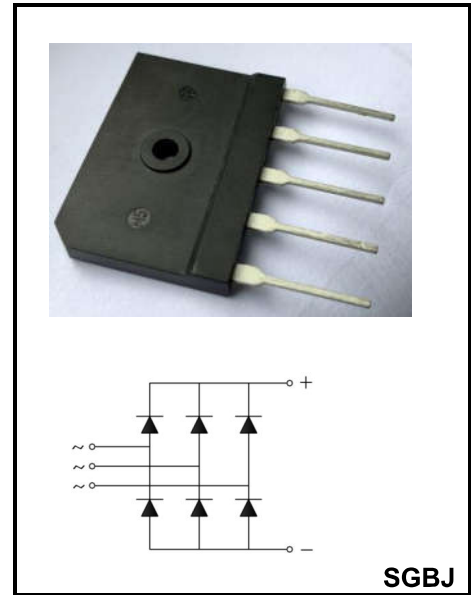
Forward Current – 35A

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

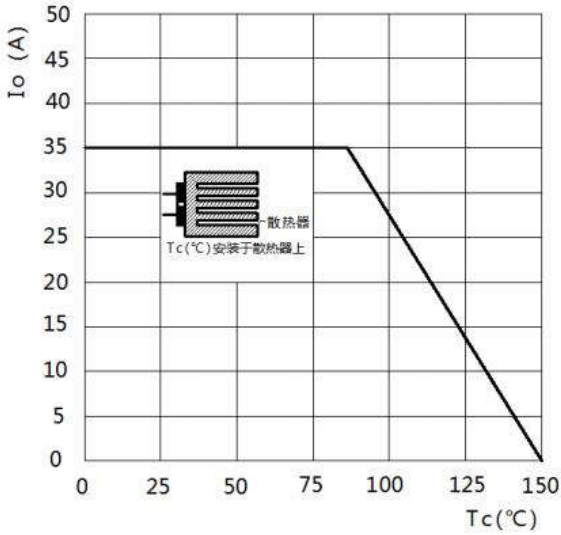


Fig.2-Maximum Non-Repetitive Surge Current

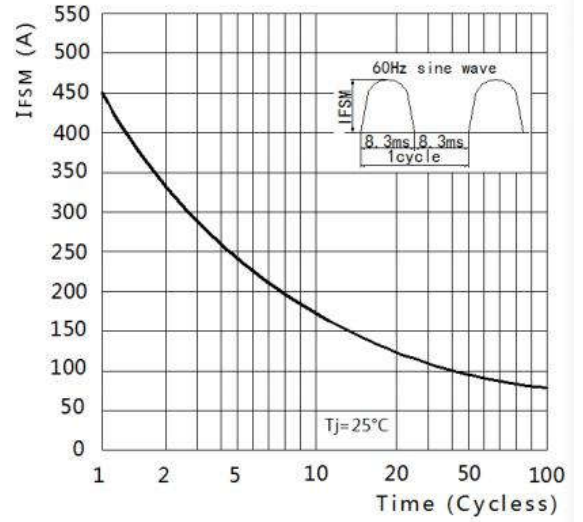


Fig.3-Typical Reverse Characteristics

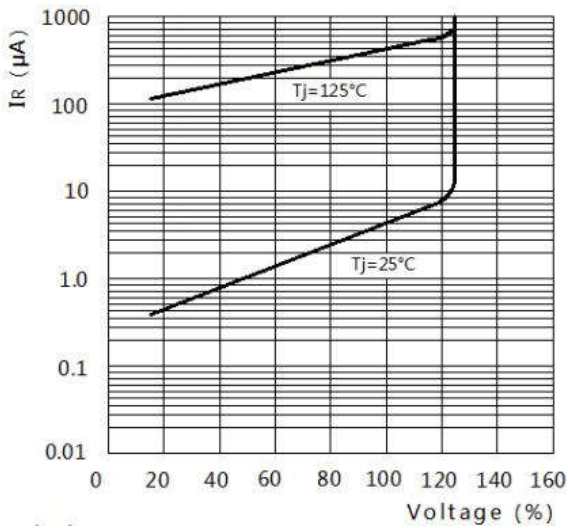
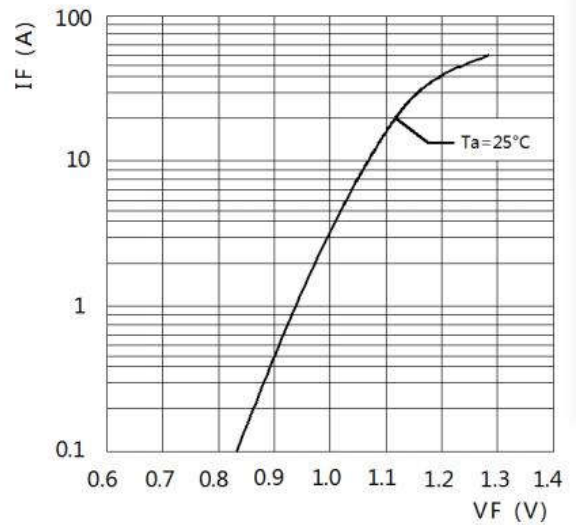
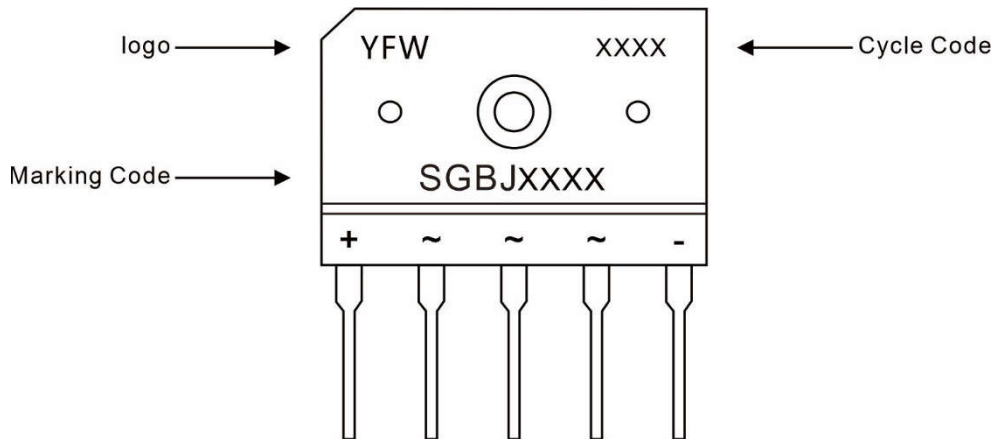


Fig.4-Typical Forward Characteristics



Marking Diagram



Ordering information

Package	Packing Description	Packing Quantity
SGBJ	bulk	100PCS/Box 1000PCS/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

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