

50A GLASS PASSIVATED BRIDGE RECTIFIER Reverse

Voltage - 800 to 1600 V

Forward Current – 50A

FEATURES

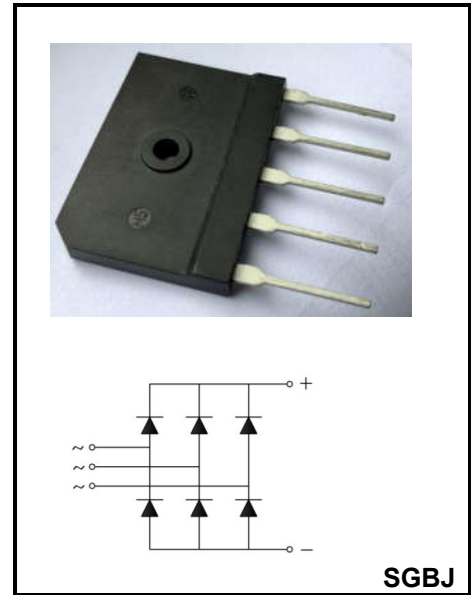
- ◆ Surge overload rating-500 amperes peak
- ◆ Polarity:As marked on body
- ◆ Ideal for printed circuit board
- ◆ Plastic material has U/L

The flammability classification 94V-0

- ◆ Reliable low cost construction utilizing molded plastic technique

MECHANICAL DATA

- ◆ Case: SGBJ
- ◆ Terminals: Solderable per MIL-STD-750, Method 2026



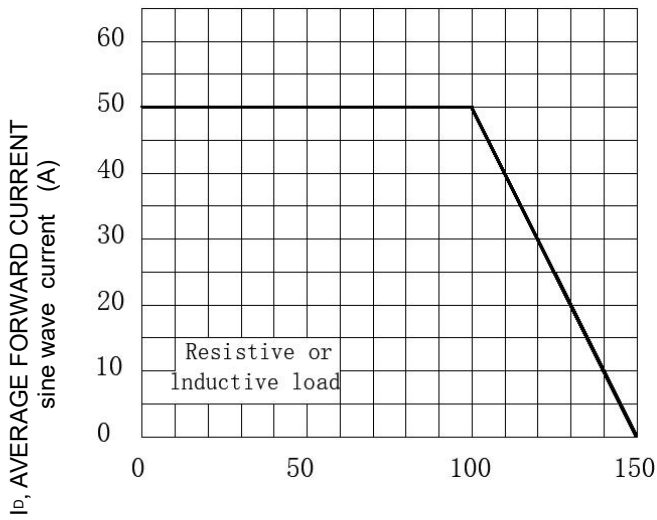
Maximum Ratings and Electrical characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

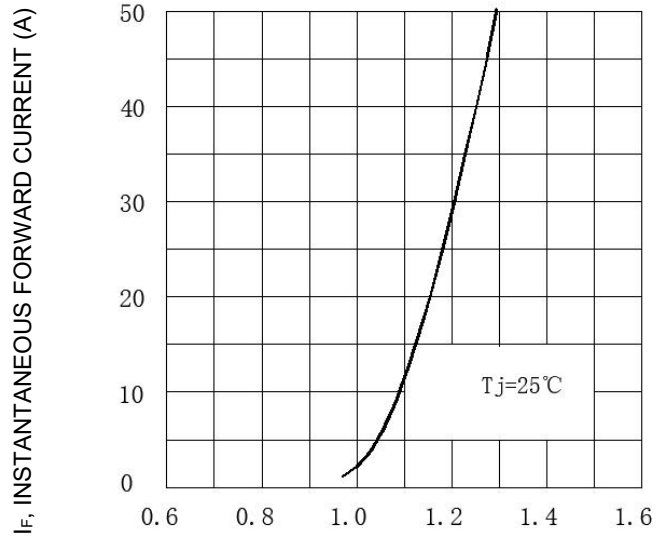
Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20 %.

Parameter	Symbols	SGBJ5008	SGBJ5010	SGBJ5012	SGBJ5014	SGBJ5016	Units	
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	800	1000	1200	1400	1600	V	
Maximum RMS voltage	V_{RMS}	900	1100	1300	1500	1700	V	
Maximum DC Blocking Voltage	V_{DC}	800	1000	1200	1400	1600	V	
Maximum Average Forward Rectified Current	$I_{(AV)}$	50						A
Peak forward surge current single half sine-wave superimposed on rated load (JEDEC Method) 50Hz $T_j=25^{\circ}C$	I_{FSM}	500						A
Forward Voltage per element @ $I_F=25A$ DC	V_F	1.10						V
Maximum reverse current at rated Blocking voltage per leg $T_j=150^{\circ}C$	I_{RRM}	3						mA
Rating for fusing (t=1~10ms)	I^2t	1200						A ² S
A.C.50/60Hz;R.M.S.;1min	Viso	2500						V
Mounting Torque (Recommended torque:0.65 N· m)	Ms	0.8						N· m
Approximate Weight	Wt	10						g
Maximum thermal resistance per (1) tpotar ldiode	$R_{\theta JC}$	9/1.5						°C/W
Operating and Storage Temperature Range	T_j, T_{stg}	-40 ~ +150						°C

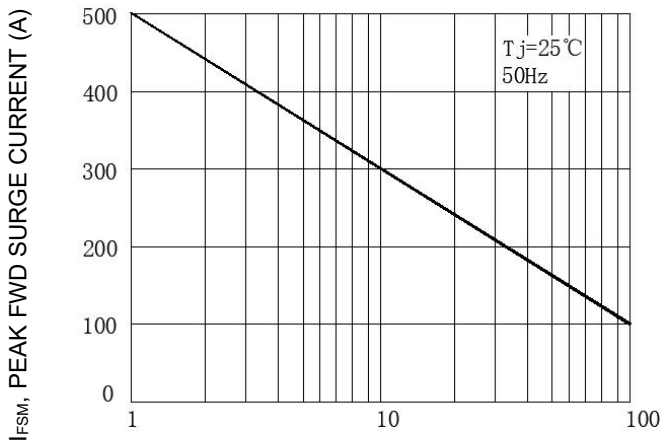
RATINGS AND CHARACTERISTIC CURVES



T_C , TEMPERATURE (°C)
Fig.1 Forward Current Derating Curve

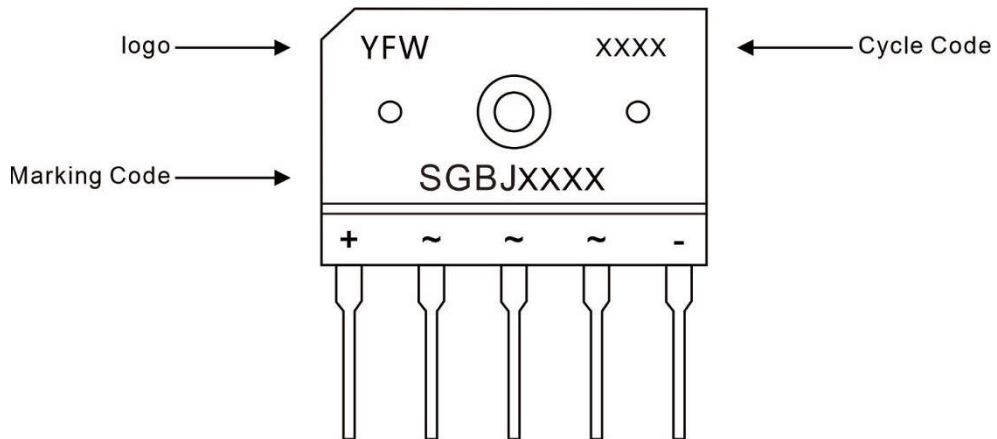


V_F , INSTANTANEOUS FWD VOLTAGE (V)
Fig.2 Maximum Forward Characteristics, per element



NUMBER OF CYCLES
Fig.3 Max Non-Repetitive Surge Current

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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