

50A GLASS PASSIVATED BRIDGE RECTIFIER Reverse

Voltage - 800 to 1600 V

Forward Current – 50A

FEATURES

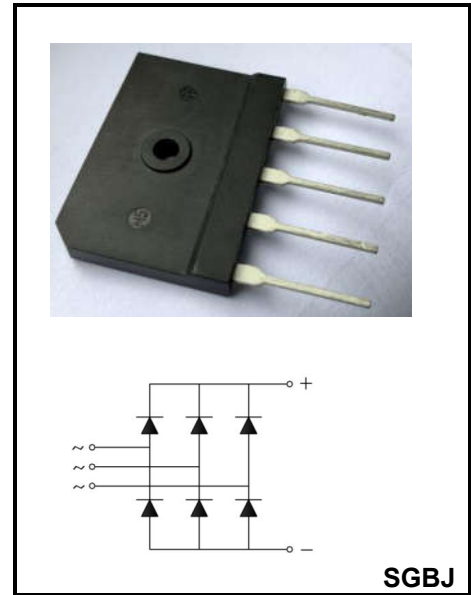
- ◆ Surge overload rating-500 amperes peak
- ◆ Polarity:As marked on body
- ◆ Ideal for printed circuit board
- ◆ Plastic material has U/L

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



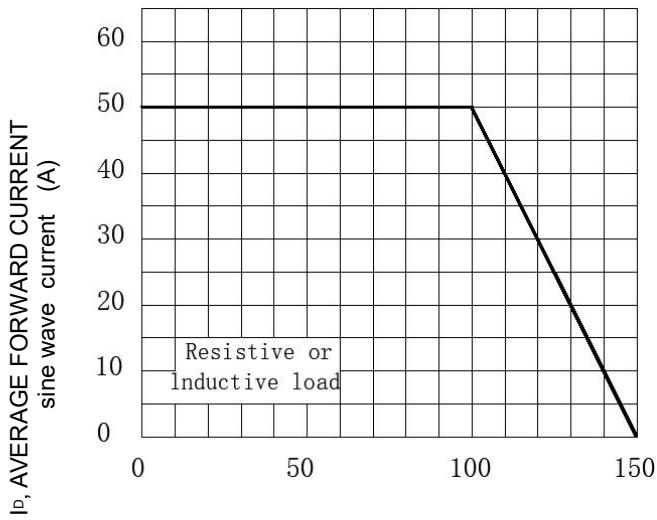
Maximum Ratings and Electrical characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

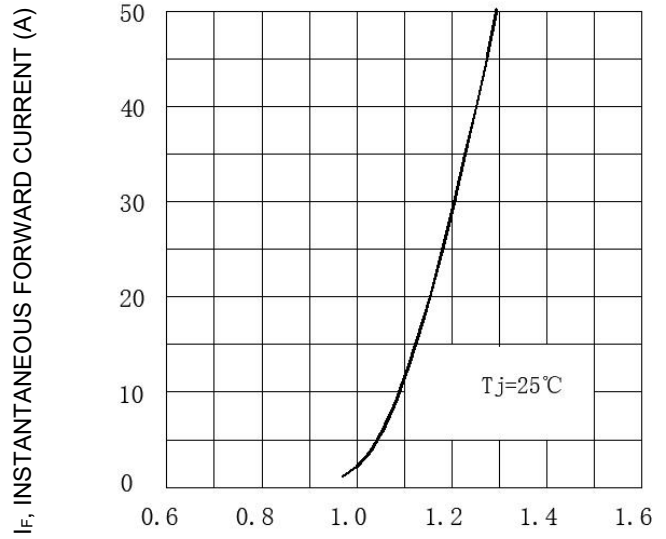
Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20 %.

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

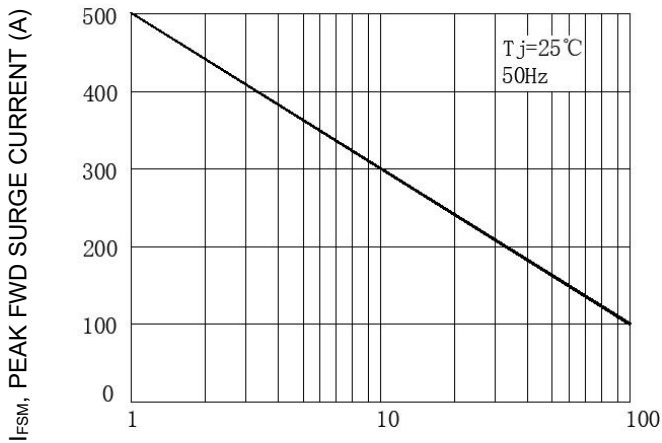
RATINGS AND CHARACTERISTIC CURVES



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

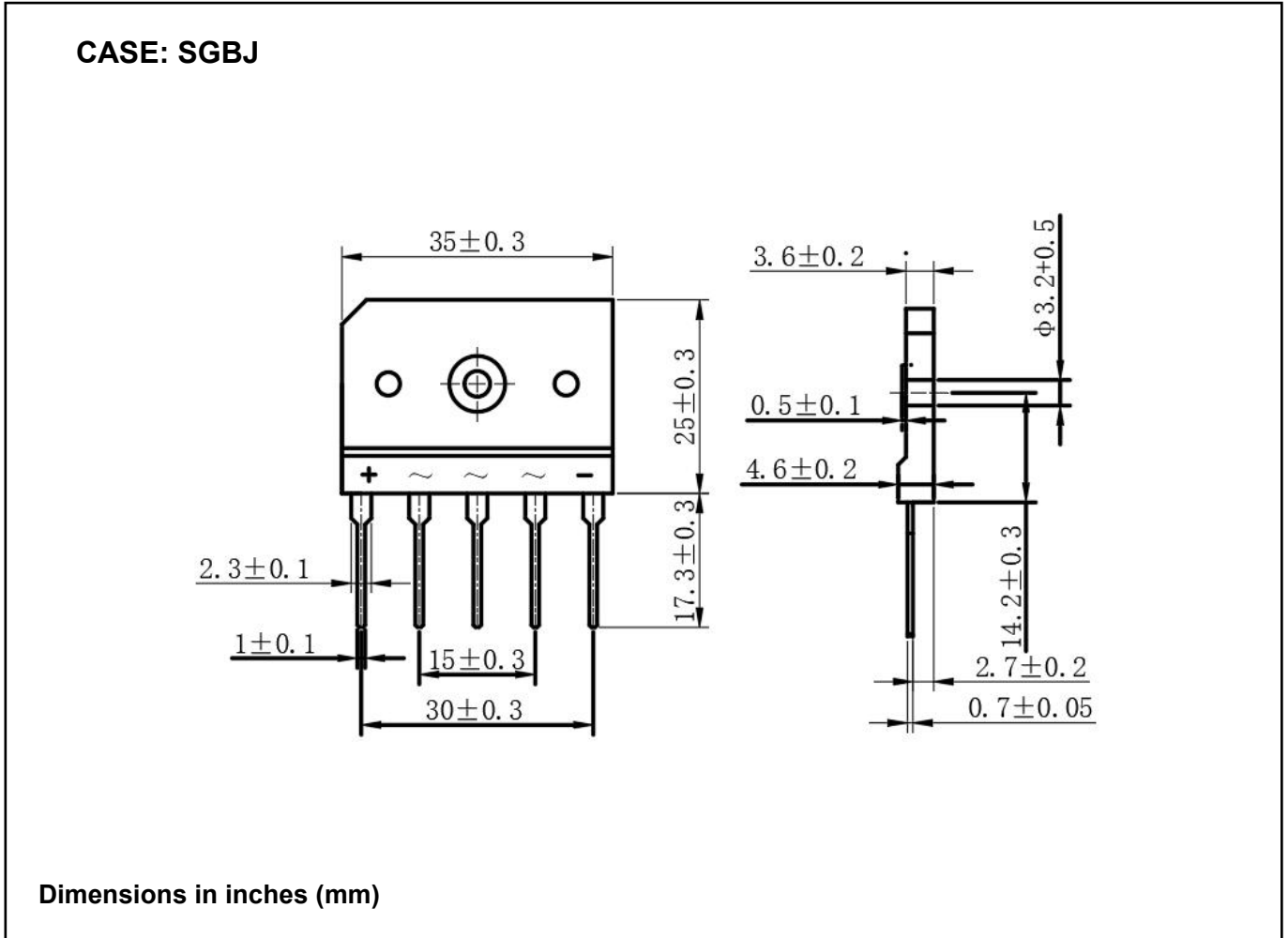


V_F , INSTANTANEOUS FWD VOLTAGE (V)
Fig.2 Maximum Forward Characteristics, per element



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

Package Outline Dimensions millimeters



Summary of Packing Options

Package	Packing Description	Packing Quantity	Industry Standard
SGBJ	BOX	100	EIA-481-1