

35A High Current Glass Passivated Single Phase

Voltage - 800 to 1600 V

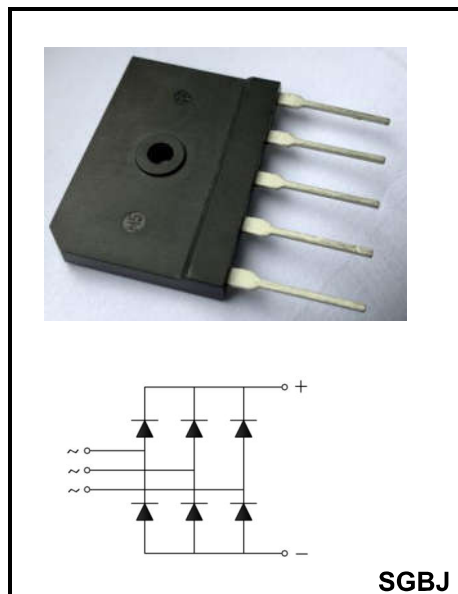
Forward Current – 35A

FEATURES

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

MECHANICAL DATA

- ◆Case: SGBJ-B
- ◆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

图 1. 电流降额曲线

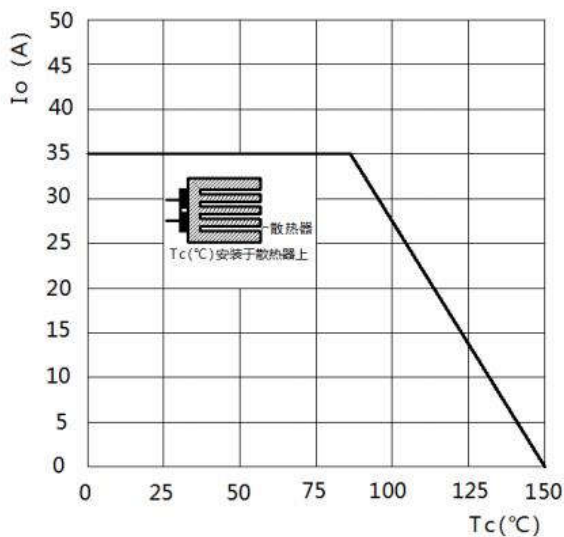


FIG3. Typical Reverse Characteristics Per Bridge Element

图 3. 典型反向特性

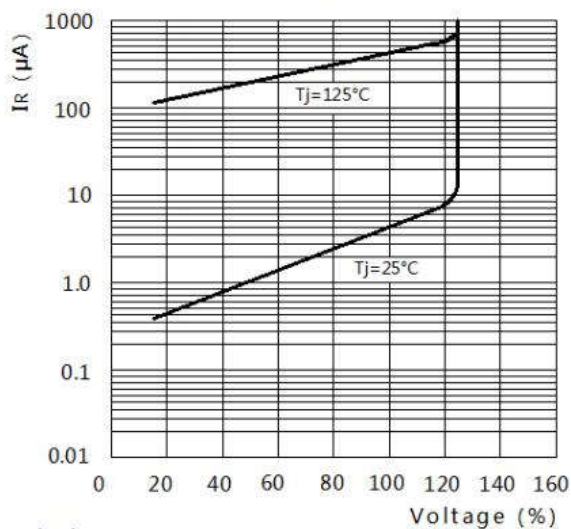


图 2. 最大正向不重复峰值浪涌电流

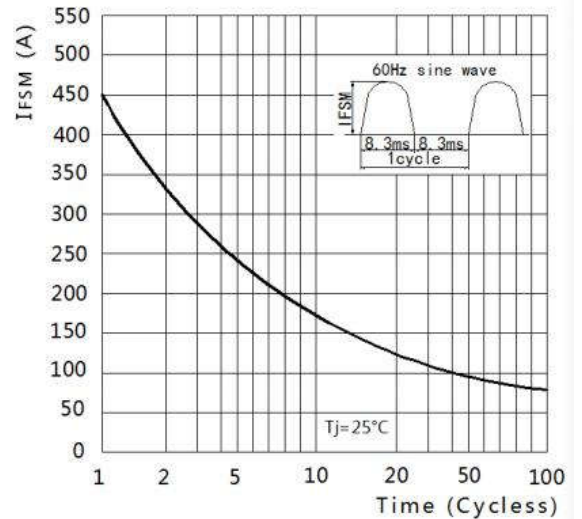
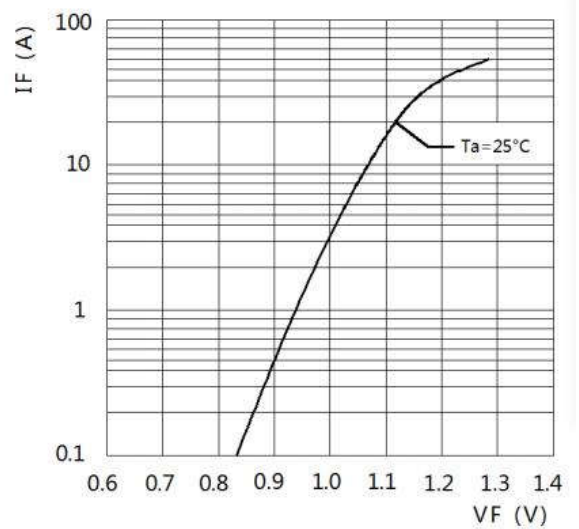


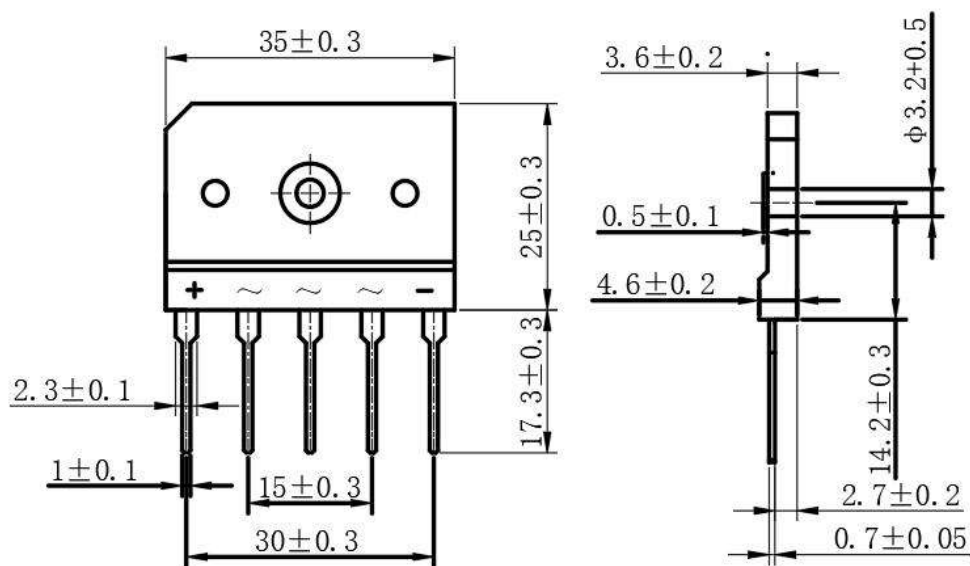
FIG4. Typical Forward Characteristics Per Bridge Element

图 4. 典型正向特性



Package Outline Dimensions millimeters

CASE: SGBJ



Dimensions in inches (mm)

Summary of Packing Options

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