

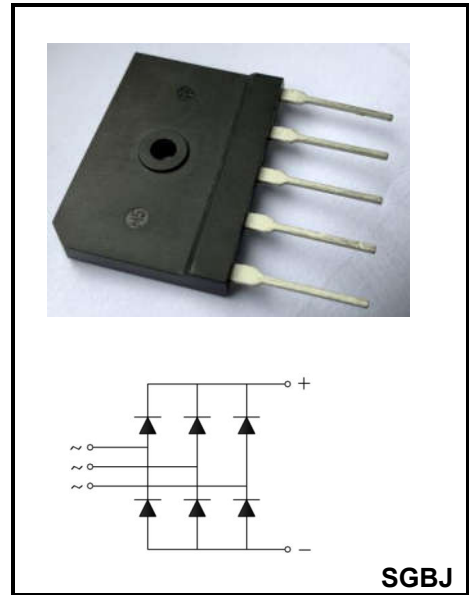
35A High Current Glass Passivated Single Phase

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, $T_c=85^{\circ}C$	$I_{(AV)}$	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

图 1. 电流降额曲线

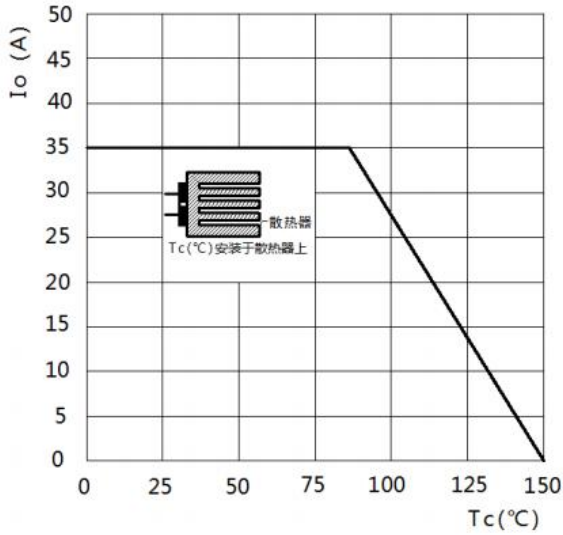


FIG3. Typical Reverse Characteristics Per Bridge Element

图 3. 典型反向特性

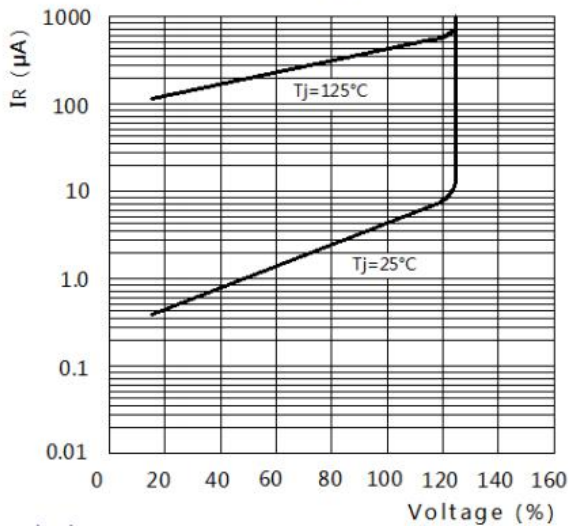


图 2. 最大正向不重复峰值浪涌电流

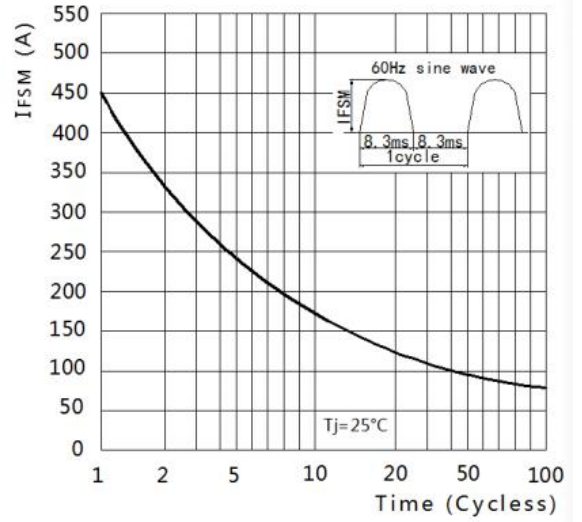
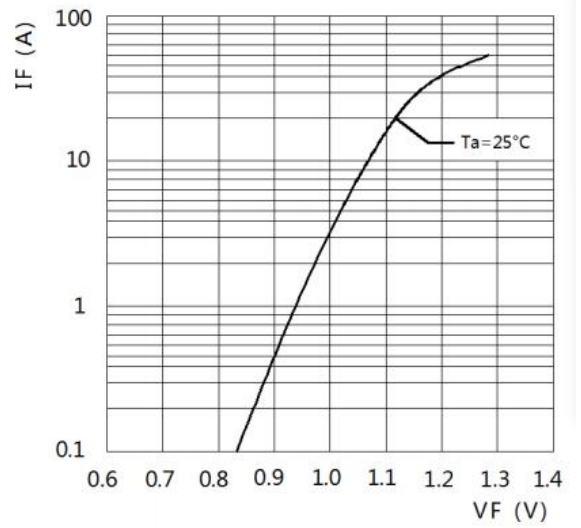
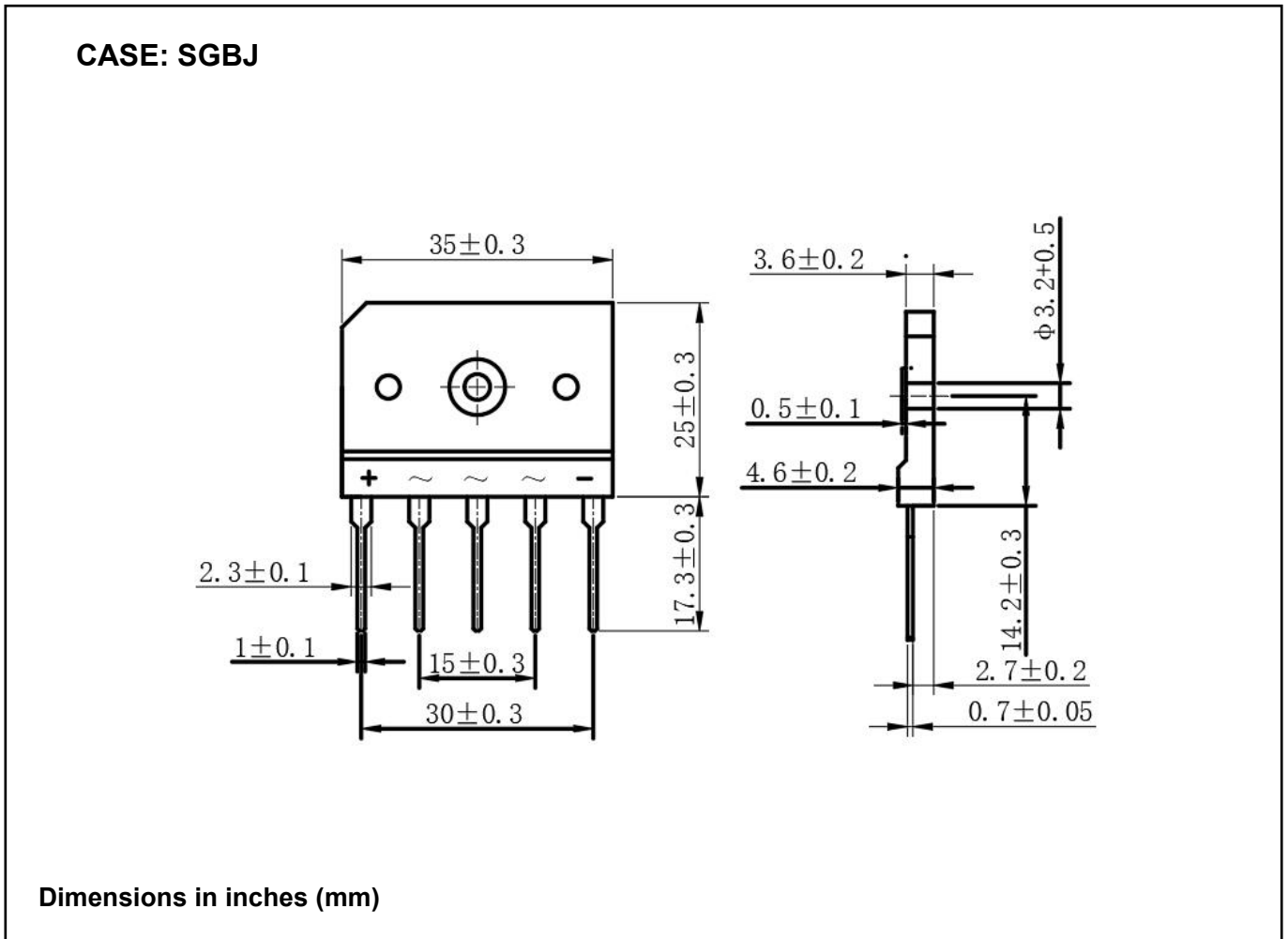


FIG4. Typical Forward Characteristics Per Bridge Element

图 4. 典型正向特性



Package Outline Dimensions millimeters



Summary of Packing Options

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