

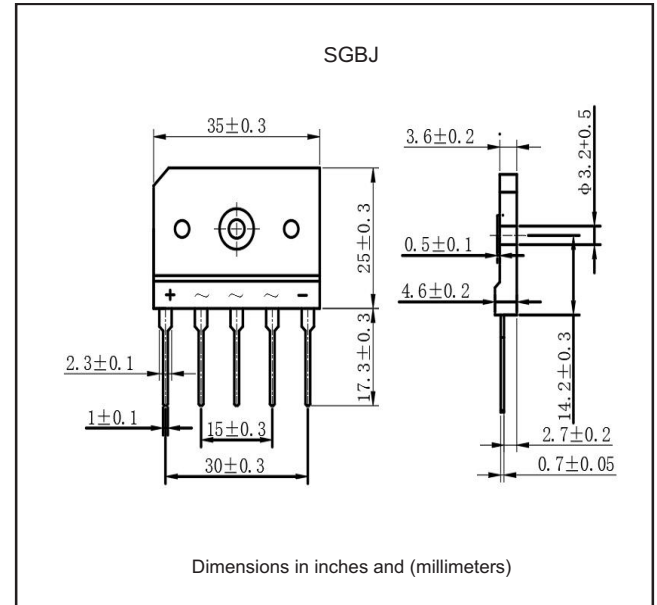
Features

- Glass passivated chip
- Low reverse leakage current
- High surge current capability
- Suffix "H" indicates Halogen-free parts

Mechanical data

- Case : SGBJ
- Polarity : marked on body

Package outline



Maximum ratings and Electrical Characteristics (AT $T_A=25^{\circ}\text{C}$ unless otherwise noted)

PARAMETER	CONDITIONS	SYMBOL	MIN.	TYP.	MAX.	UNIT
Maximum average forward rectified current	with heatsink, $T_c = 85^{\circ}\text{C}$	$I_{F(AV)}$			25	A
Forward surge current	8.3ms single half sine-wave (JEDEC methode)	I_{FSM}			370	A
Reverse current	$V_R = V_{RRM}$ $T_J = 25^{\circ}\text{C}$	I_R			5	μA
	$V_R = V_{RRM}$ $T_J = 125^{\circ}\text{C}$				500	
Rating for fusing	$1\text{ms} < t < 8.3\text{ms}$, $T_J = 25^{\circ}\text{C}$	I^2t			568.135	A^2s
Typical thermal resistance	Junction to case	R_{BJC}		1.6		$^{\circ}\text{C/W}$
Storage temperature		T_{STG}	-55		+150	$^{\circ}\text{C}$
Dielectric strength	Terminals to case AC 1 minute	V_{dis}			2.5	KV

Note: 1. Device mounted on 300mm*300mm*1.6mm Cu plate heatsink.

SYMBOLS	V_{RRM}^{*1} (V)	V_{RMS}^{*2} (V)	V_R^{*3} (V)	V_F^{*4} (V)	Operating temperature T_J , ($^{\circ}\text{C}$)
SGBJ2508	800	560	800	1.1	-55 to +150
SGBJ2510	1000	700	1000		
SGBJ2512	1200	840	1200		
SGBJ2516	1600	1120	1600		

*1 Repetitive peak reverse voltage

*2 RMS voltage

*3 Continuous reverse voltage

*4 Maximum forward voltage@ $I_F=15\text{A}$

Rating and characteristic curves

FIG1.Derating Curve For Output Rectified Current

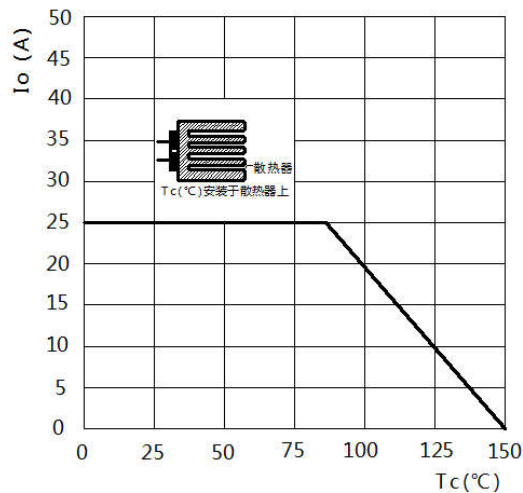


FIG2.Maximum Non-Repetitive Peak Forward Surge Current Per Bridge Element

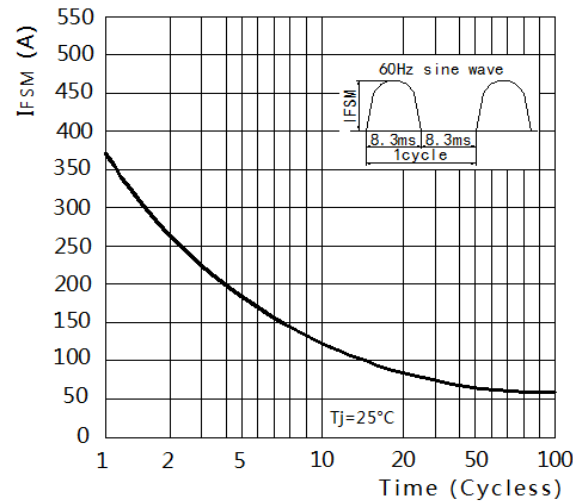


FIG3.Typical Reverse Characteristics Per Bridge Element

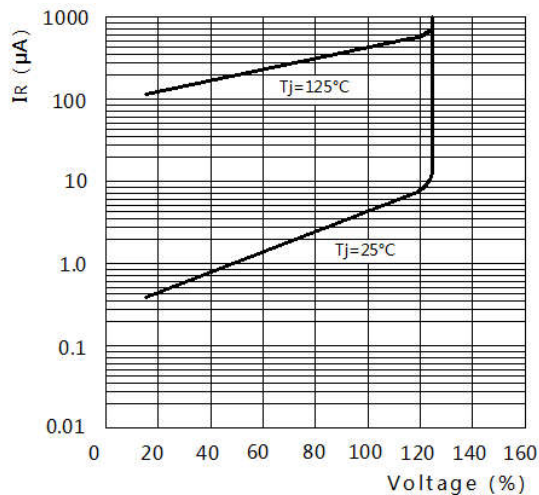
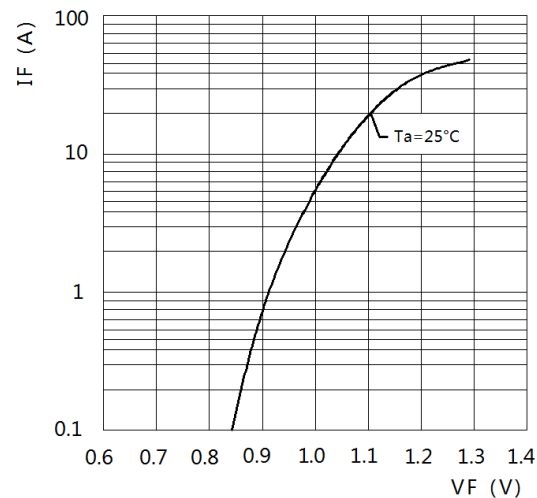
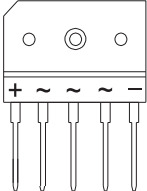
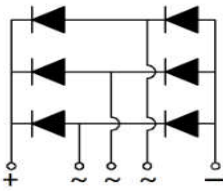


FIG4.Typical Forward Characteristics Per Bridge Element



Pinning information

Simplified outline	Symbol
	

Marking

Type number	Marking code
SGBJ2508	SGBJ2508
SGBJ2510	SGBJ2510
SGBJ2512	SGBJ2512
SGBJ2516	SGBJ2516