

60A Glass Passivated Single-Phase Bridge Rectifier

Reverse Voltage - 800 to 1600 V

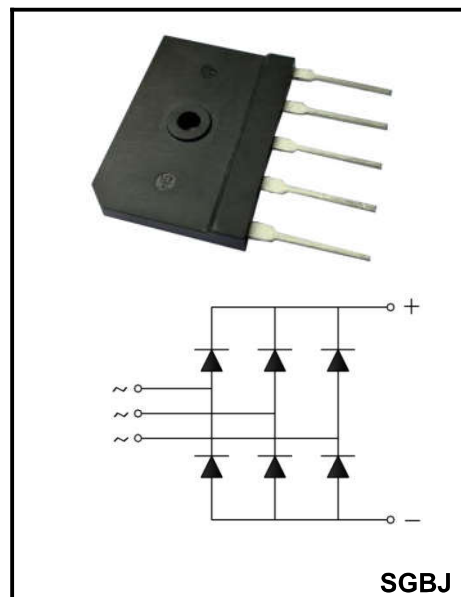
Forward Current - 60A

FEATURES

- ◆Glass passivated chip
- ◆Low reverse leakage current
- ◆High surge current capability
- ◆Case to Terminal Isolation Voltage 2500V

MECHANICAL DATA

- ◆Case: SGBJ
- ◆Marking/Polarity: Marked on Body
- ◆Weight: About 11.60grams



Maximum Ratings and Thermal Characteristics @ Ta = 25°C unless otherwise noted

Parameter	Symbols	SGBJ6008	SGBJ6010	SGBJ6012	SGBJ6014	SGBJ6016	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 output rectified current $T_A=120^{\circ}C$	$I_{F(AV)}$	60					A
Forward Voltage Per Leg @ $I_F=30A$	V_F	1.1					V
Peak surge forward current, 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	600					A
Rating for fusing, $1ms < t < 8.3ms$, $T_j=25^{\circ}C$, Rating of per diode	I^2t	1494					A ² S
Rms isolation voltage from case to leads	V_{isol}	2500					V
Operating Junction and storage temperature range	T_j, T_{stg}	$-55 \sim +150$					$^{\circ}C$
Maximum DC reverse current at rated DC blocking voltage per leg $T_A=25^{\circ}C$ $T_A=125^{\circ}C$	I_R	5 500					μA
Typical Junction Capacitance	C_J	160					pF
Maximum thermal resistance per leg	$R_{\theta JC}$	0.7					$^{\circ}C/W$

Note:

(1) Junction to case with heatsink

(2) Recommended mounting position is to bolt down on heatsink with silicone thermal compound for maximum heat transfer with M3 screw .

Characteristics(Typical)

Fig 1-forwardCurrent derating Curve

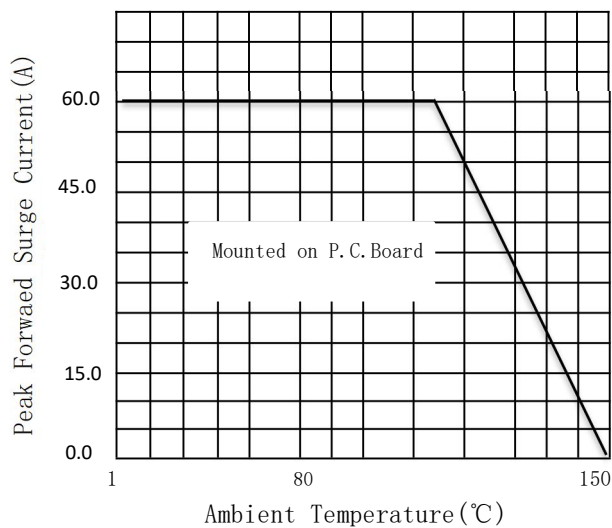


Fig.2-Maximum Non-Repetitive Surge Currnet

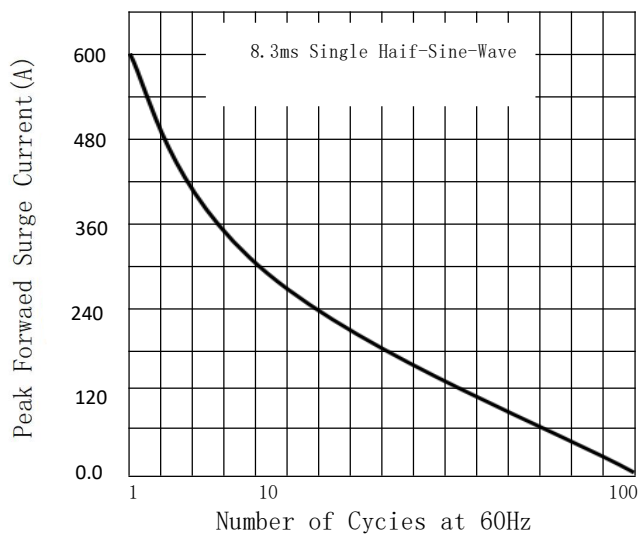


Fig.3-Typical Reverse Characteristics

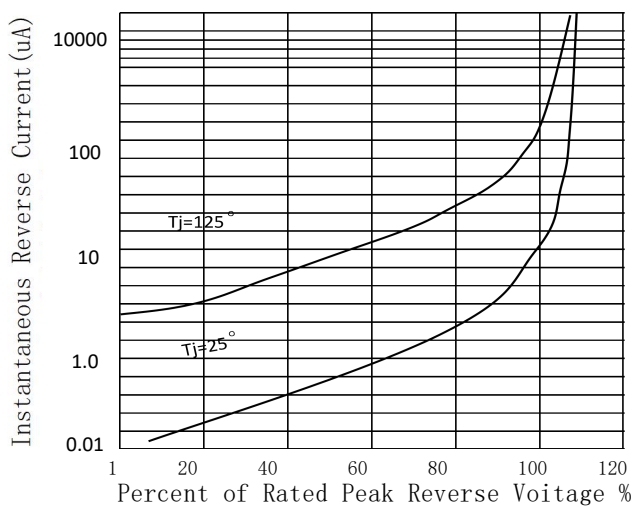
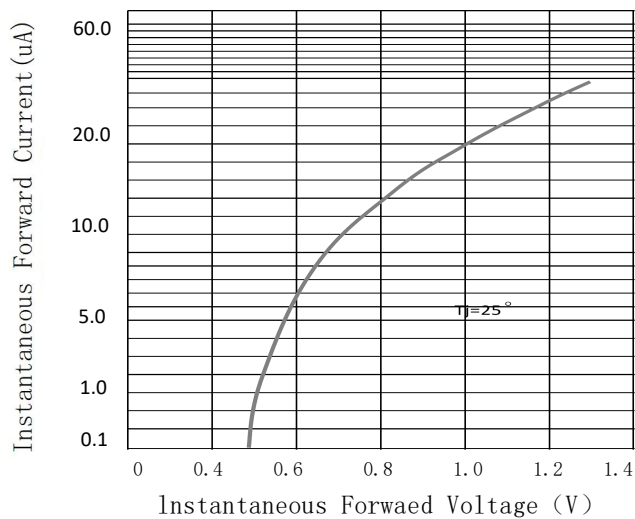
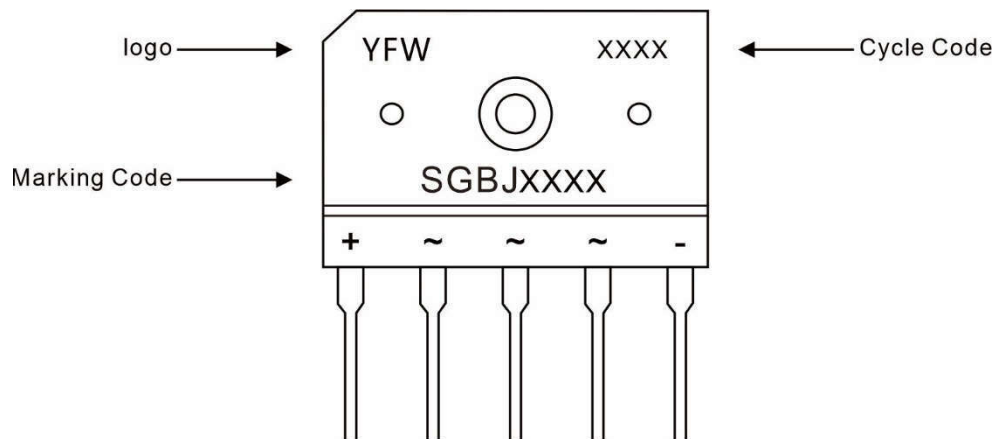


Fig.4-Typical Forwaed Characteristics



Marking Diagram



Ordering information

Package	Packing Description	Packing Quantity
SGBJ	bulk	100PCS/Box 1000PCS/Carton

Package Dimensions

SGBJ

Dim.	Millimeter(mm)		Dimensions in Inch	
	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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