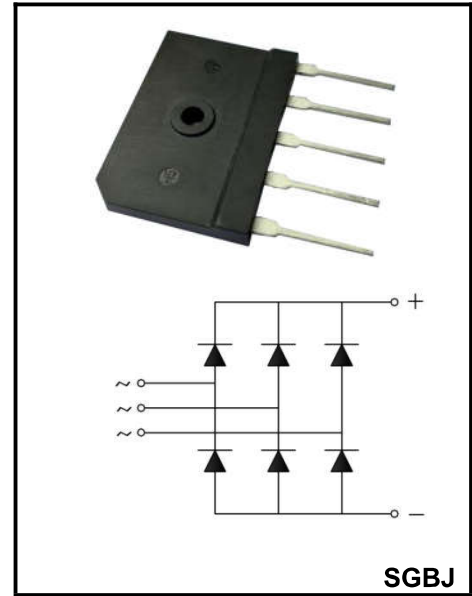


Glass Passivated Single Phase Bridge Rectifiers
Reverse Voltage - 800 to 1600 V
Forward Current –15A
Features

- ◆Glass passivated die construction
- ◆Ideal for printed circuit boards
- ◆High surge current capability
- ◆High temperature soldering guaranteed: 265°C /10 seconds, 0.375" (9.5mm) lead length, 5lbs. (2.3kg) tension

Mechanical Data

- ◆Case: Molded plastic case
- ◆Terminals: Plated leads solderable per MIL-STD-750, Method 2026
- ◆Polarity: Marked on Body
- ◆Mounting Position: Any


Maximum Ratings and Thermal Characteristics

TA = 25°C unless otherwise noted

Conditions	Symbols	SGBJ1508	SGBJ1510	SGBJ1512	SGBJ1514	SGBJ1516	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
average forward output current sine wave ,R-load Tc =100°C	I_D	15					A
Peak forward surge current single half sine-wave superimposed on rated load (JEDEC Method) 50Hz Tj=25°C	I_{FSM}	250					A
Rating for fusing (t=1~10ms)	I^2t	312					A ² s
A.C.50/60Hz;R.M.S.;1min	V_{ISO}	2500					V
Operating Junction and storage temperature range	T_j, T_{stg}	-40 to +150					°C
Mounting Torque (Recommended torque:0.65 N·m)	M_s	0.8					N·m
Approximate Weight	W_t	10					g

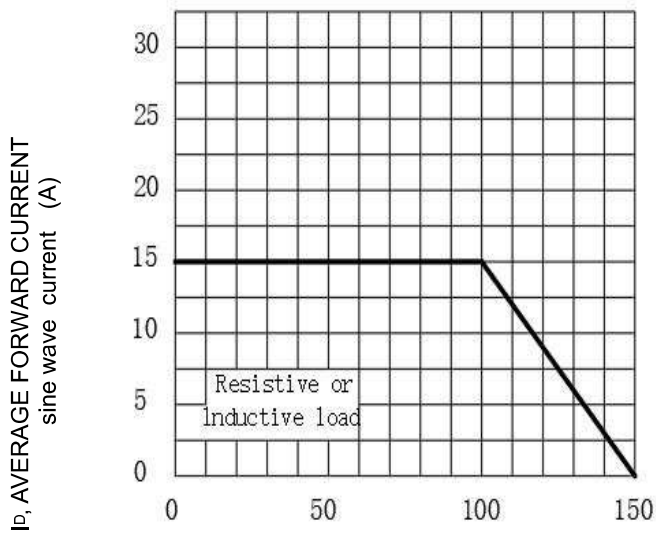
Electrical Characteristics

TA = 25°C unless otherwise noted

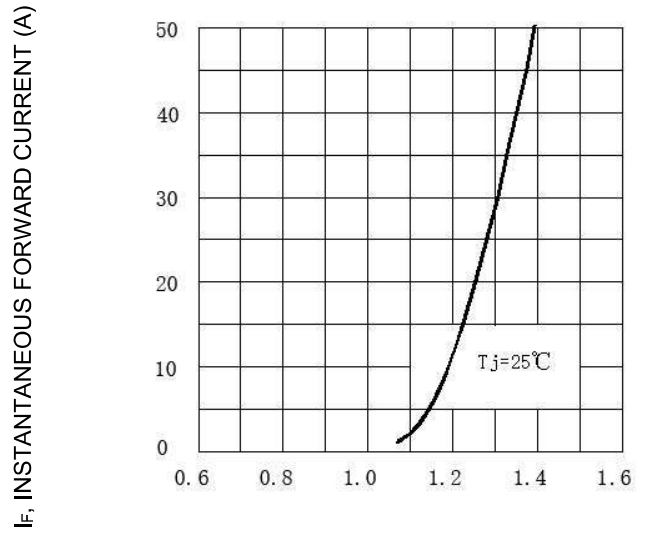
Conditions	Symbol	Values	Units
Maximum Forward Voltage per leg $I_F = 7.5A \quad T_j = 25^\circ C$	V_{FM}	1.18	V
Maximum reverse current at rated blocking voltage per leg $T_j = 150^\circ C$	I_{RRM}	3	mA
Maximum thermal resistance per ⁽¹⁾ per diode total	$R_{th(j-c)}$	9 1.5	°C/W

Notes: (1) Junction to case

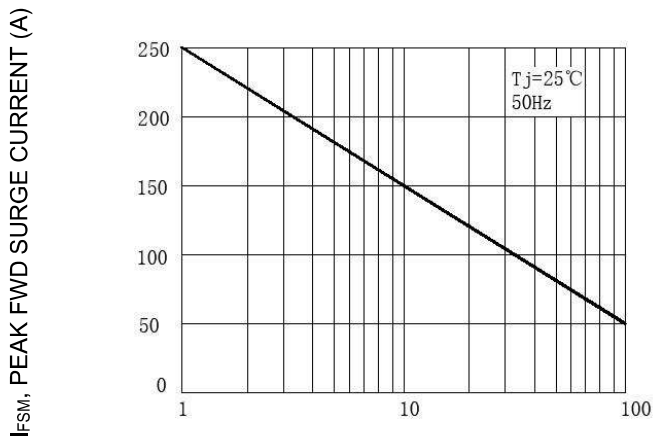
Performance Curves



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

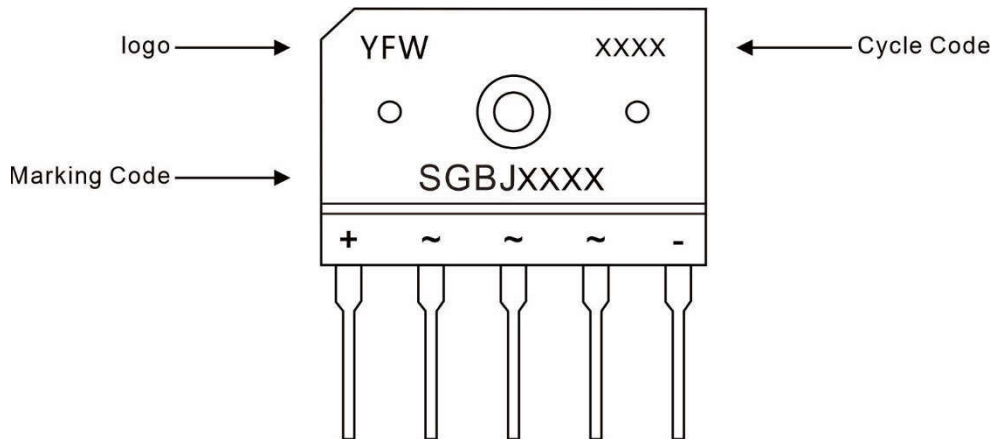


V_F, INSTANTANEOUS FORWARD VOLTAGE (V)
Fig.2 Maximum Forward Characteristics, per element



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

Marking Diagram

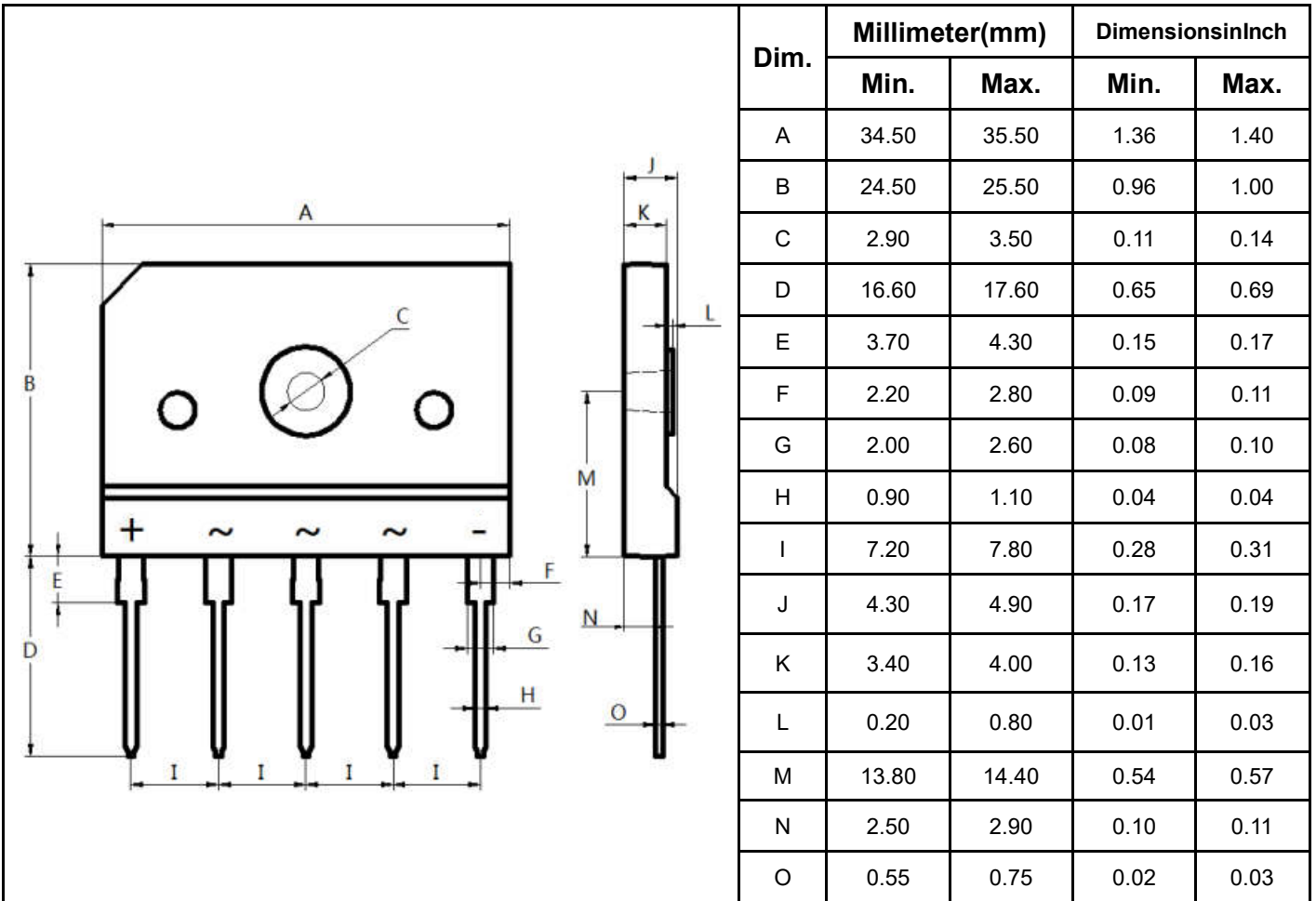


Ordering information

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

Package Dimensions

SGBJ



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