

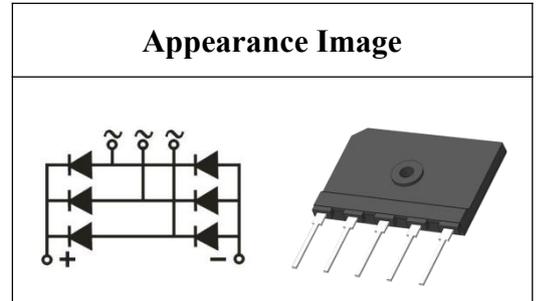
■ **Features**

- Glass passivated chip
- Low reverse leakage current
- High surge current capability
- Reliable low cost construction utilizing molded plastic technique

Reverse Voltage 800-1600 V
Forward Current 50.0 A max

■ **Mechanical Data**

- Case: SGBJ
- Polarity symbols being marked on body
- Molding compound meets UL 94V-0 flammability rating
- RoHS-compliant, Solder plated, solderable per MIL-STD-750, Method 2026



■ **Marking**

- SGBJ50xx(08~16)

■ **Maximum Ratings @ Ta = 25°C unless otherwise noted**

PARAMETER	SYMBOL	UNIT	SGBJ5008	SGBJ5010	SGBJ5012	SGBJ5014	SGBJ5016	
Repetitive peak reverse voltage	V_{RRM}	V	800	1000	1200	1400	1600	
Maximum RMS voltage	V_{RMS}	V	560	700	840	980	1120	
Maximum DC blocking Voltage	V_{DC}	V	800	1000	1200	1400	1600	
Maximum average output current@60Hz sine wave, resistance load	$I_{F(AV)}$	A	50.0					
Peak forward surge current 8.3 ms single half sine wave superimposed on rated load	I_{FSM}	A	550					
Peak forward surge current 1.0 ms single half sine wave superimposed on rated load		A	1100					
Current squared time @1ms≤t<8.3ms Tj=25°C, Rating of per diode	I^2t	A ² S	1255.38					
Isolation Breakdown Voltage AC 50Hz/60Hz; R.M.S.; 1min	V_{ISO}	V	2500					
Mounting Torque (Recommended torque:0.65 N·m)	M_s	N.m	0.8					
Storage temperature	T_{stg}	°C	-55~+150					
Junction temperature	T_j	°C	-55~+150					

■ **Electrical Characteristics @ Tj = 25°C unless otherwise noted**

PARAMETER	TEST CONDITIONS	SYMBOL	UNIT	SGBJ5008	SGBJ5010	SGBJ5012	SGBJ5014	SGBJ5016
Maximum instantaneous forward voltage	$I_F=25A$	V_F	V	1.1				
Maximum DC reverse current at rated DC blocking voltage	$V_R=V_{DC}, T_j=25°C$	I_R	μA	5				
	$V_R=V_{DC}, T_j=100°C$	I_R		500				

■ Characteristic Curve (Typical)

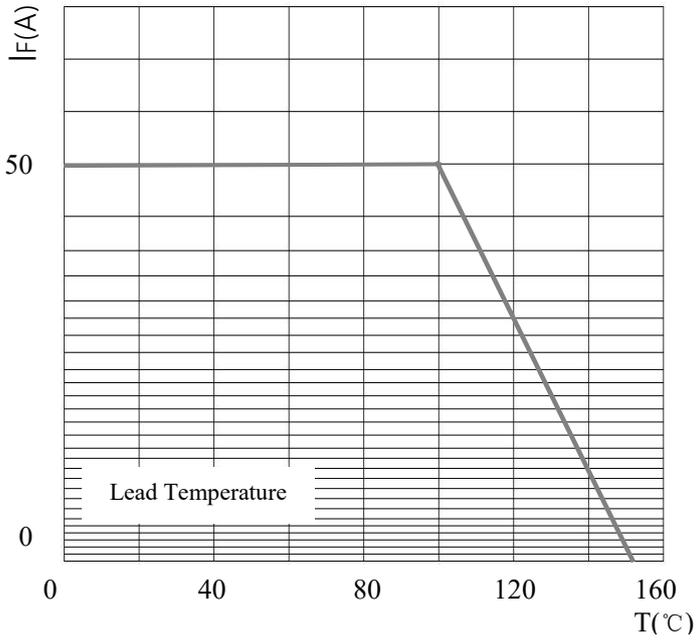


FIG1. Derating Curve For Output Rectified Current

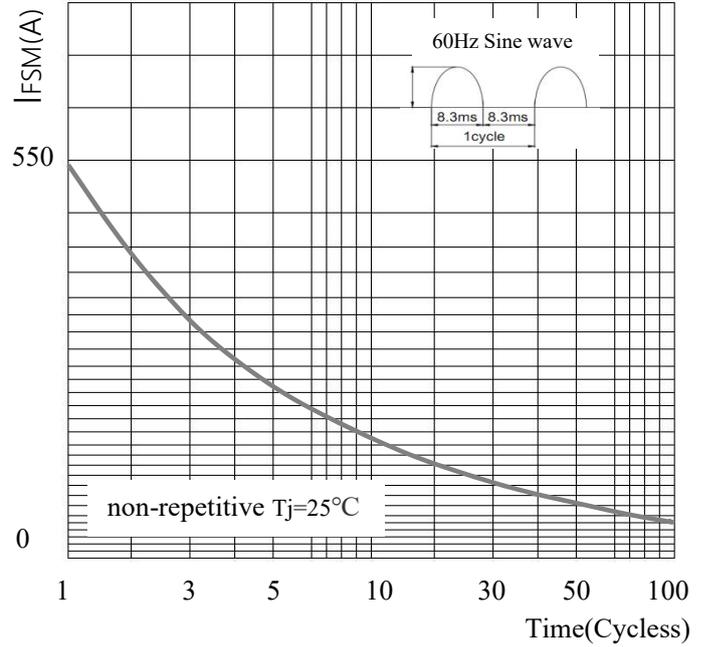


FIG2. Surge Forward Current Capability

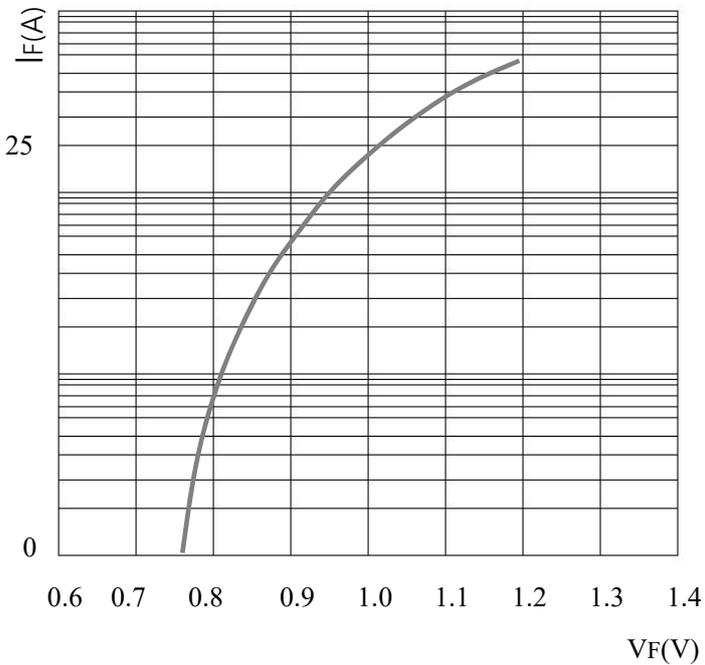


FIG3. Typical Forward Characteristics

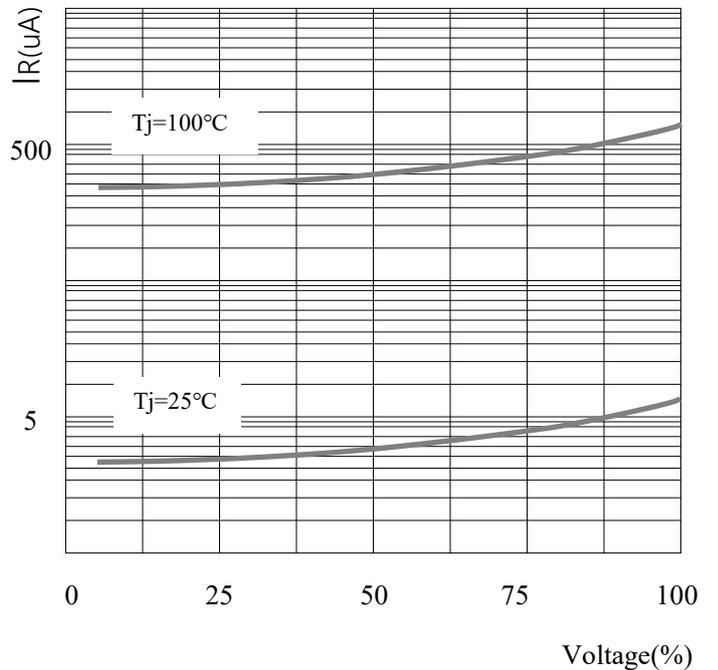
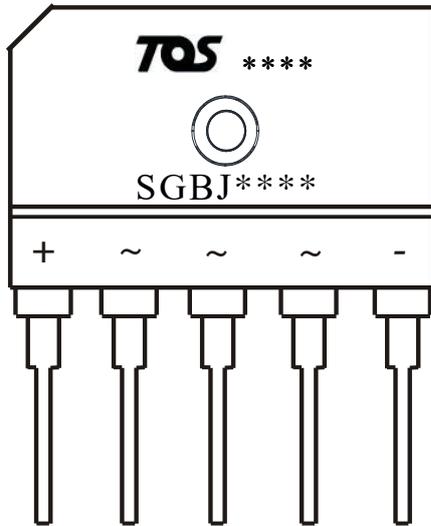


FIG4. Typical Reverse Characteristics

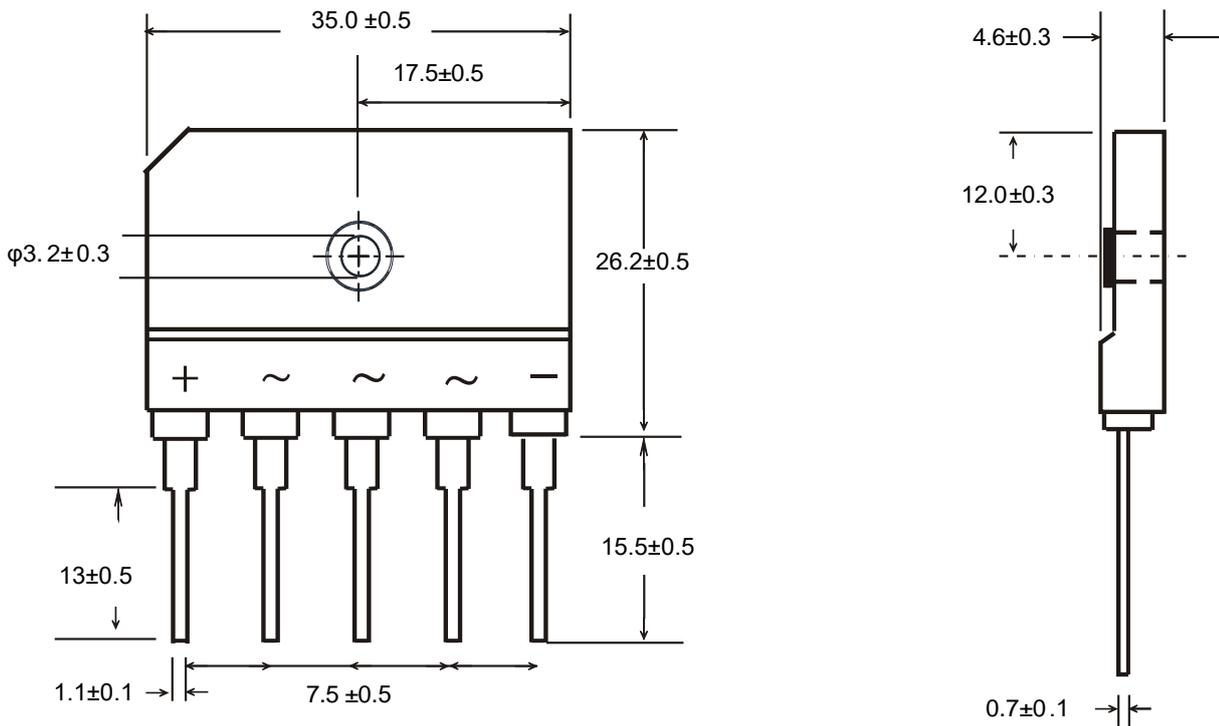
■ **Marking and packet information**



SGBJ**** : Marking Model **TOS** : Brand Logo

Packaging information	
每盒	200PCS
每箱	1200PCS
脚长定制	支持

■ **SGBJ Package outline dimensions**



Dimensions in millimeters

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