

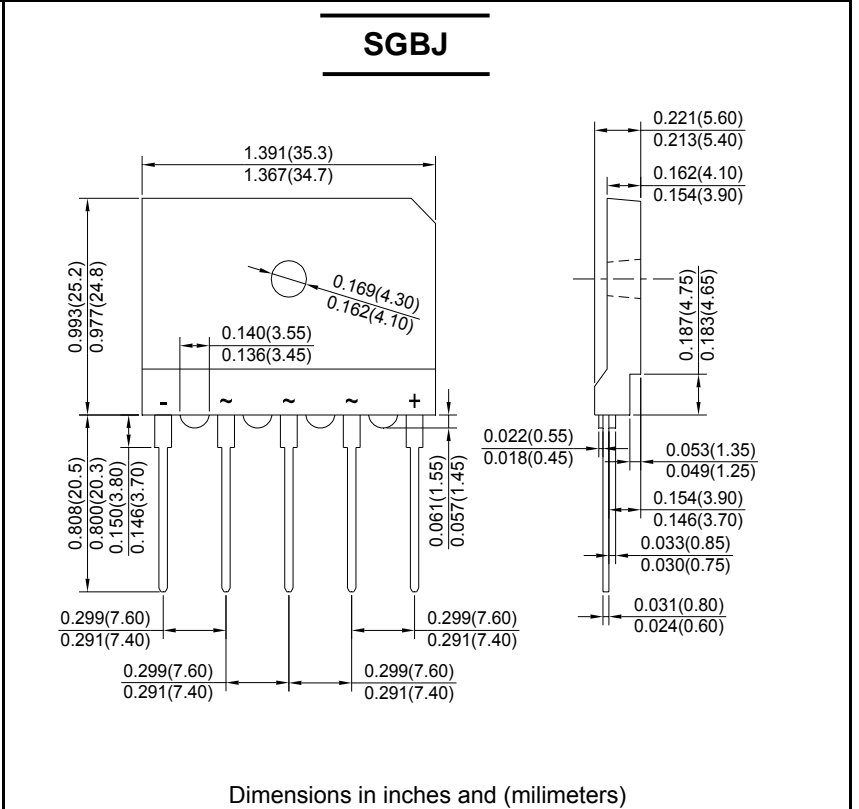
<b>GLASS PASSIVATED 3 PHASE BRIDGE RECTIFIERS</b>	<b>REVERSE VOLTAGE 800 - 1600 Volts</b> <b>FORWARD CURRENT - 25 Amperes</b>
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**FEATURES**

- Glass passivated chip, high reliability
- Low forward voltage drop
- Insulation voltage 2500V
- Small size and light weight
- Small thermal resistance, high thermal conductivity, Low temperature rise

**Applications**

- Power supply of DC equipment
- Input rectifier for PWM converter
- DC motor



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.  
 Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%

CHARACTERISTICS	SYMBOL	-08	-10	-12	-16	UNIT
Peak Repetitive Voltage	$V_{RRM}$	800	1000	1200	1600	V
Peak Non-Repetitive Reverse Voltage	$V_{RSM}$	900	1100	1300	1700	V

## FORWARD CONDUCTION

CHARACTERISTICS	SYMBOL	SGBJ2508	SGBJ2510	SGBJ2512	SGBJ2516	UNIT
Maximum Average Forward Rectified Current @ $T_c=110^\circ C$	$I_{F(AV)}$	25				A
Peak Forward Surge Current $t=8.3ms$ at 60HZ	$I_{FSM}$	350				A
$I^2t$ Rating for fusing	$I^2t$	508				$A^2 S$
Maximum Forward Voltage drop per element at 12.5A Peak	$V_F$	1.1				V
Reverse peak current $V_R=V_{RRM}@T_J=25^\circ C$	$I_R$	5				$\mu A$
$V_R=V_{RRM}@T_J=125^\circ C$		3				mA
RMS Isolation Voltage from Case to Lead	$V_{ISO}$	2500				V
Typical Thermal Resistance (Note1)	$R_{\theta JC}$	0.8				$^\circ C/W$
Mounting torque M3	$M_d$	0.8				N.m
Weight	$W_t$	10				g

## THERMAL CHARACTERISTICS

Operating Temperature Range	$T_J$	-55 to +150	$^\circ C$
Storage Temperature Range	$T_{STG}$	-55 to +150	$^\circ C$

Notes: 1. Thermal resistance junction to case.  
 2. The typical data above is for reference only (典型值仅供参考).

# RATING AND CHARACTERISTIC CURVES

## SGBJ25 SERIES



FIG.1-FORWARD CURRENT DERATING CURVE

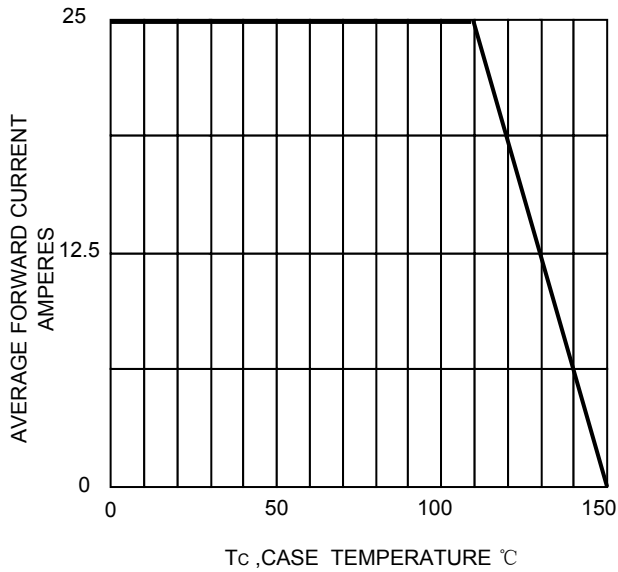


FIG.2-TYPICAL FORWARD CHARACTERISTICS

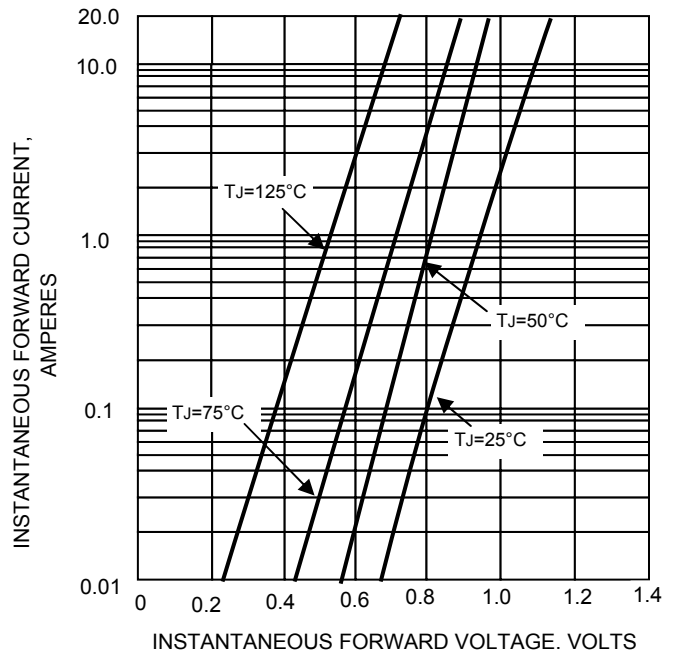


FIG.3-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

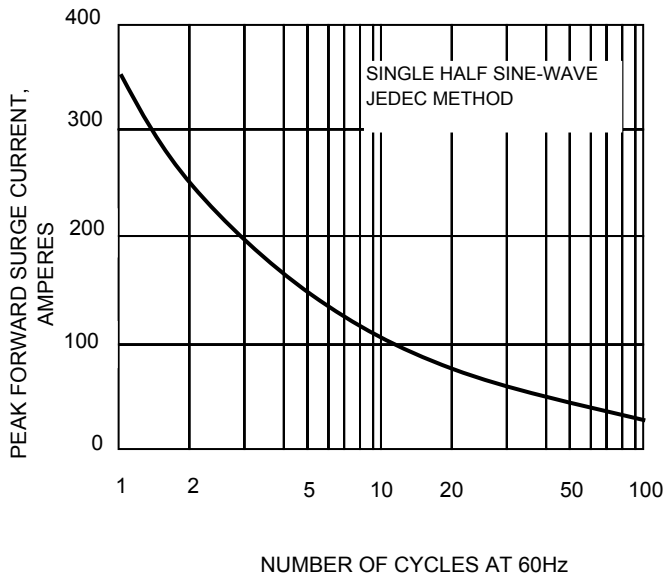
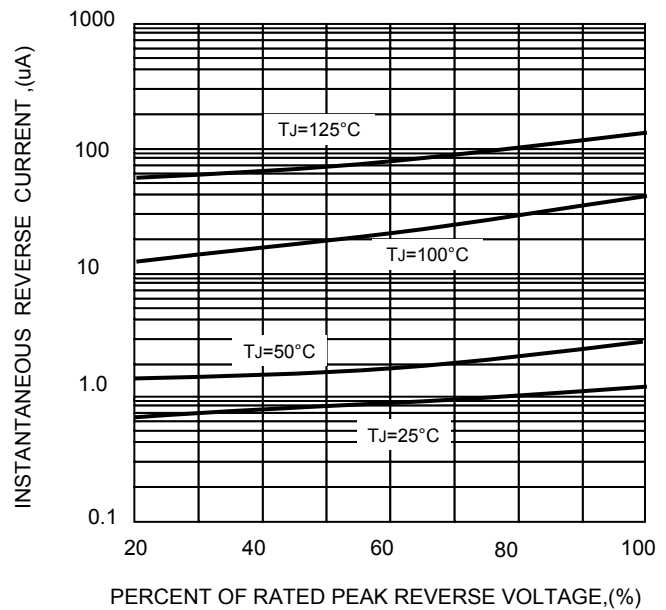


FIG.4-TYPICAL REVERSE CHARACTERISTICS



The curve graph is for reference only, can't be the basis for judgment(曲线图仅供参考)!



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