GLASS PASSIVATED 3 PHASE BRIDGE RECTIFIERS

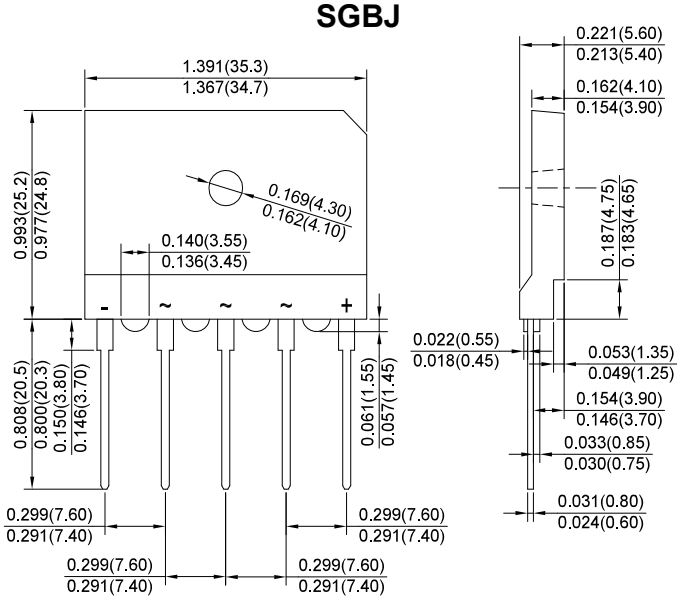
Features:

- 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

SGBJ



Dimensions in inches and (milimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

VOLTAGE RATINGS

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	SGBJ3508	SGBJ3510	SGBJ3512	SGBJ3516	UNIT
Maximum Average Forward Rectified Current @T_C=110℃	$I_{F(AV)}$	35				A
Peak Forward Surge Current t=8.3ms at 60HZ	I_{FSM}	400				A
I^2t Rating for fusing	I^2t	660				A^2S
Maximum Forward Voltage drop per element at 17.5A Peak	V_F	1.1				V
Reverse peak current $V_R=V_{RRM}$@T_J=25℃	I_R	5				μA
$V_R=V_{RRM}$@T_J=150℃		3				mA
RMS Isolation Voltage from Case to Lead	V_{ISO}	2500				V
Typical Thermal Resistance (Note1)	$R_{\theta JC}$	0.8				℃/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				℃
Storage Temperature Range	T_{STG}	-55 to +150				℃

Notes:1.Thermal resistance junction to case.
2.The typical data above is for reference only .

FIG.1-FORWARD CURRENT DERATING CURVE

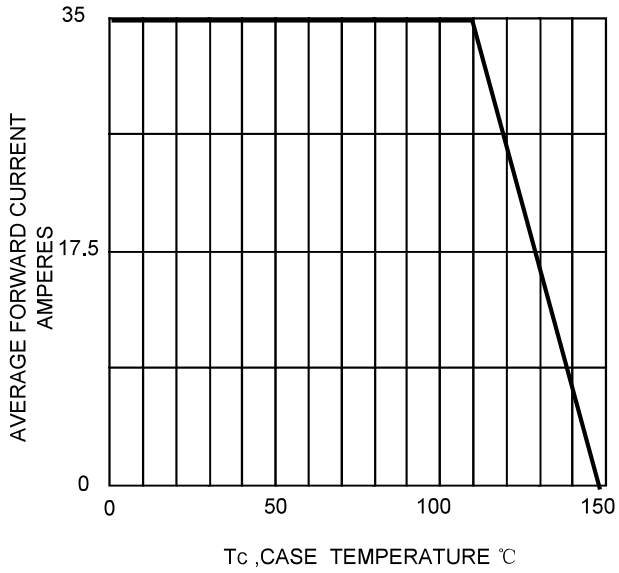


FIG.2-TYPICAL FORWARD CHARACTERISTICS

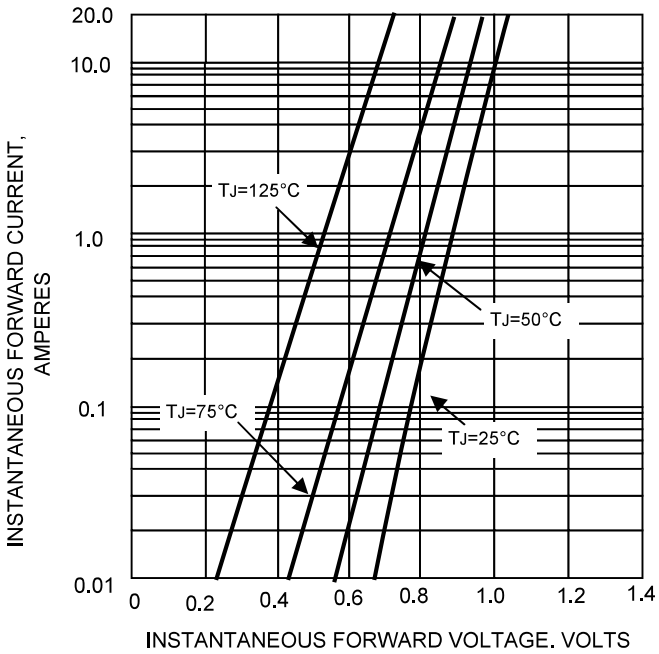


FIG.3-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

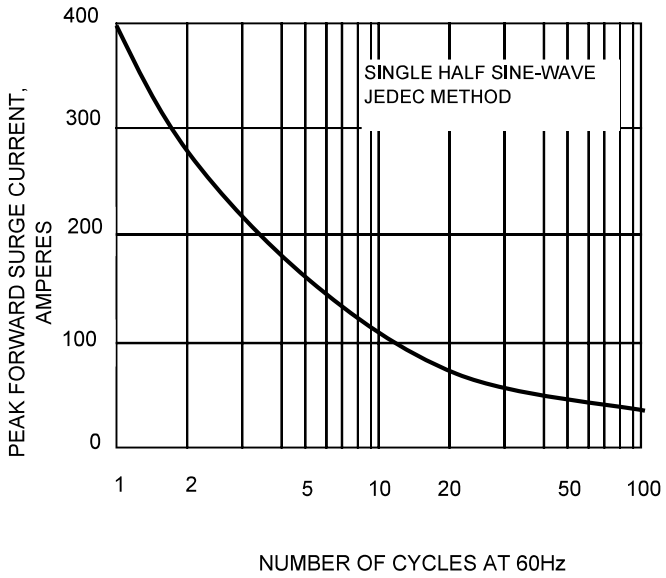
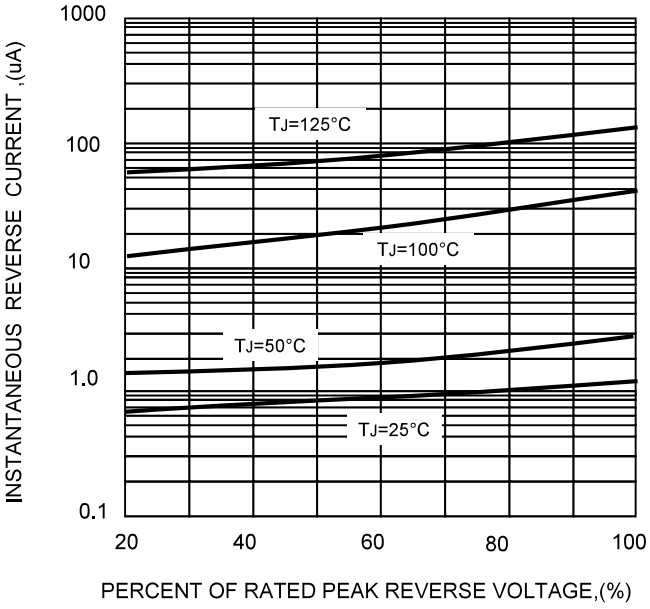


FIG.4-TYPICAL REVERSE CHARACTERISTICS



The cruve graph is for reference only, can't be the basis for judgment !