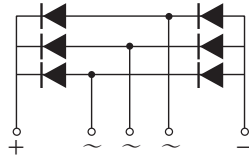


Three-phase Bridge Rectifiers

SGBPC



Features

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

Applications

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

Maximum Ratings and Electrical characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20 %.

Parameter	Symbols	SGBPC3510	SGBPC3512	SGBPC3516	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	1000	1200	1600	V
Maximum RMS voltage	V_{RMS}	700	840	1120	V
Maximum DC Blocking Voltage	V_{DC}	1000	1200	1600	V
Average Rectified Output Current	I_o	35.0			A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load	I_{FSM}	400			A
I^2t rating for fusing (1ms< t < 8.3ms)	I^2t	660			A ² S
Maximum Forward Voltage Drop Per Element at 17.5A Peak	V_F	1.1			V
Maximum Reverse Current at Rate DC Blocking Voltage Per Element @T _J =25 °C	I_R	10			uA
Operating and Storage Temperature Range	T _J , T _{stg}	-55 ~ +150			°C
Junction-to-case thermal resistance	R _{thJC}	0.5			°C/W

RATINGS AND CHARACTERISTICS CURVES (TA = 25 °C unless otherwise noted)

FIG.1-MAXIMUM FORWARD SURGE CURRENT

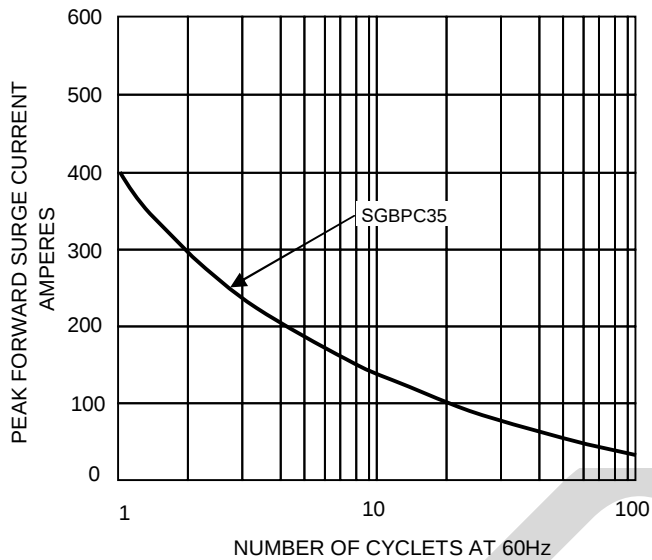


FIG.2- DERATING CURVE
OUTPUT RECTIFIED CURRENT

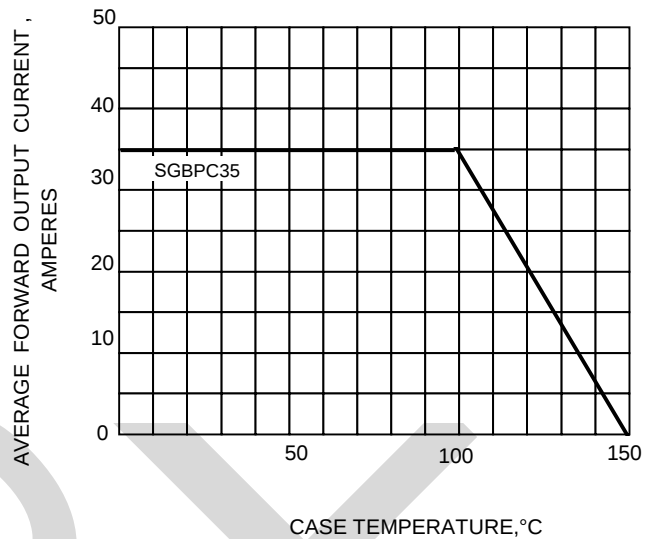


FIG.3-TYPICAL FORWARD
CHARACTERISTICS

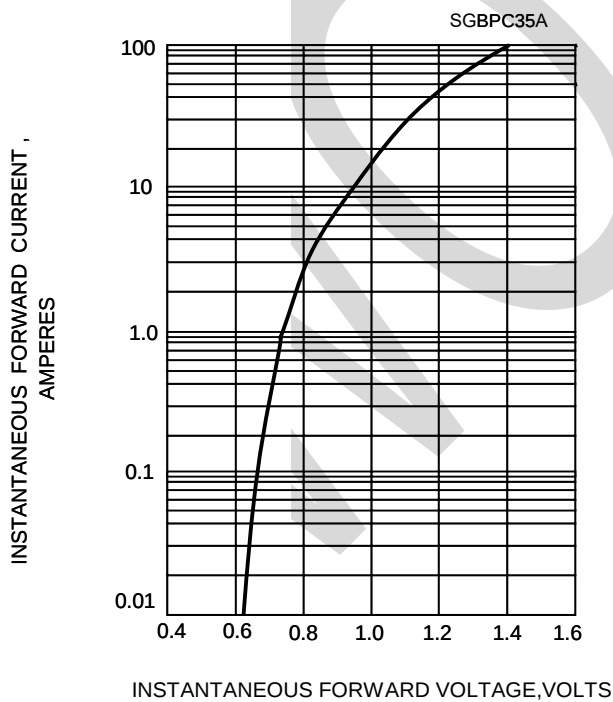
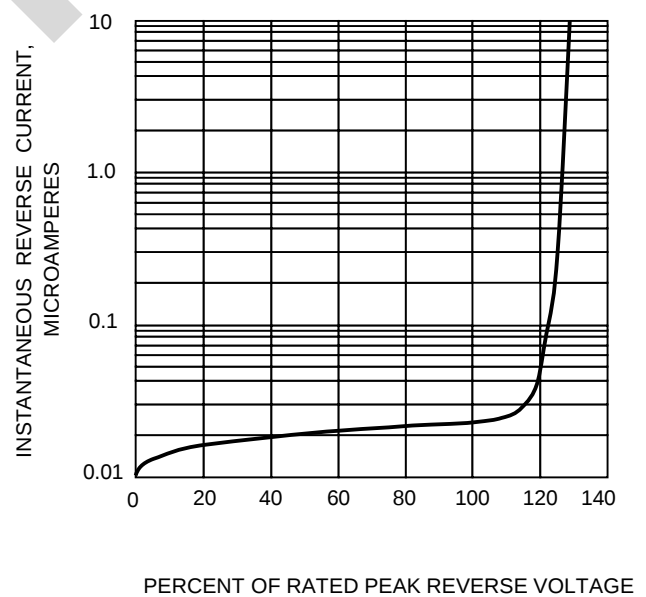


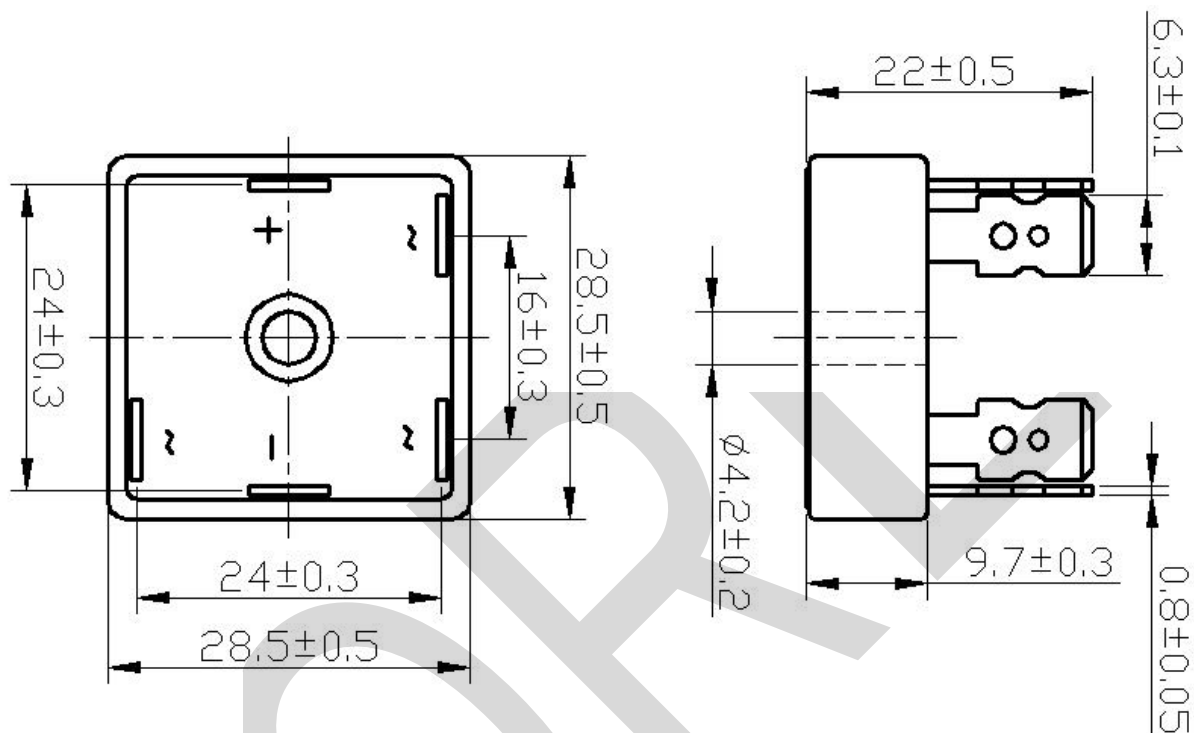
FIG.4-TYPICAL REVERSE
CHARACTERISTICS



PACKAGE OUTLINE DIMENSIONS

Note:unit mm

SGBPC



Description of model and identification

SGBPC	35	10
Package type	Current	Voltage
	35=35A	10=1000V 12=1200V 16=1600V