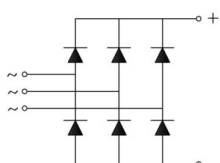
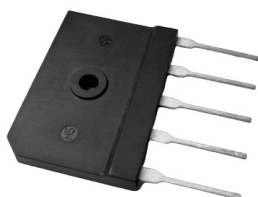


Glass Passivated Three-phase Bridge Rectifiers

SGBJ2516



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 Electrical characteristics

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

Parameter	Symbol	SGBJ2516	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	1600	V
Maximum RMS voltage	V_{RMS}	1120	V
Maximum DC Blocking Voltage	V_{DC}	1600	V
Average Rectified Output Current	I_O	25.0	A
Peak forward surge current single half sine-wave superimposed on rated load (JEDEC Method) 50Hz	I_{FSM}	350	A
I^2t rating for fusing ($t=1ms\sim10ms$)	I^2t	612	A ² S
Dielectric Strength: A.C.50/60Hz;R.M.S.; 1 min	V_{dis}	2.5	KV
Mounting torque (Recommended torque:0.65N.m)	M_s	0.8	N.m
Maximum Forward Voltage at 12.5A	V_F	1.18	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	$T_A=150\text{ }^{\circ}\text{C}$ I_R	3	mA
Junction to ambient , without heatsink Junction to case, with heatsink ¹	per diode	9	$^{\circ}\text{C}/\text{W}$
	total	1.5	
Operating and Storage Temperature Range	T_j, T_{stg}	-55 ~ +150	$^{\circ}\text{C}$

Notes: (1) Junction to case

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

Fig.1 Current Derating, Case

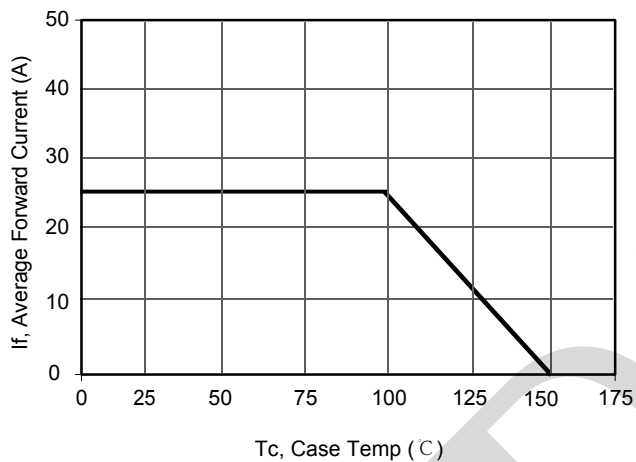


Fig.2 Maximum Non-Repetitive Peak Forward Surge Current

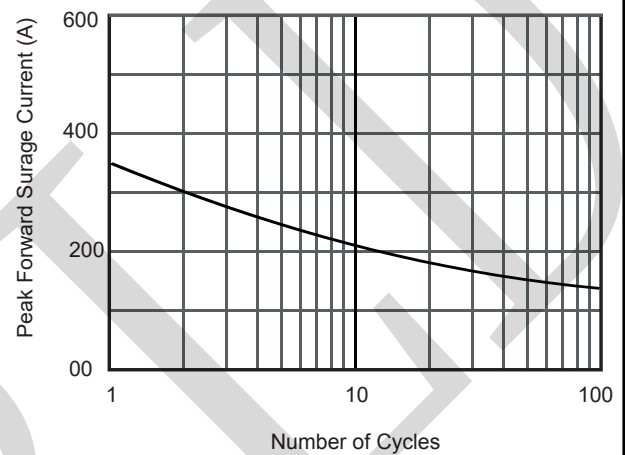
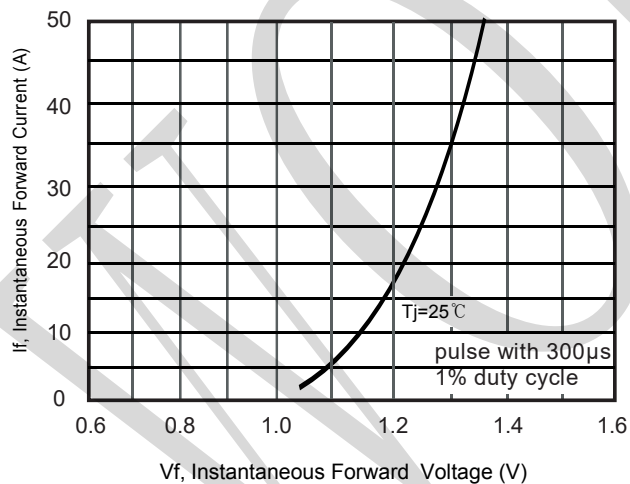
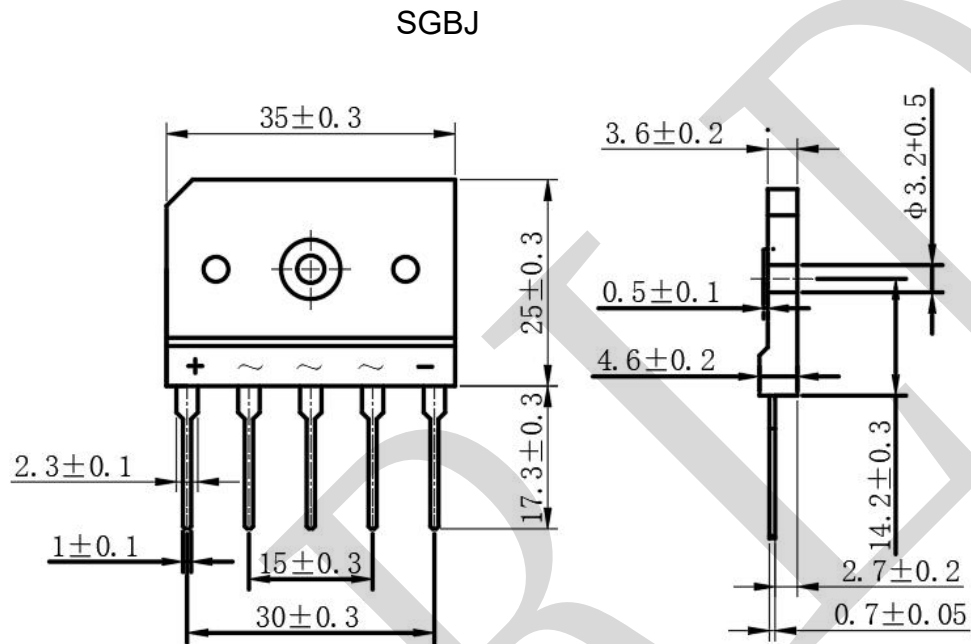


Fig.3 Typical Forward Voltage

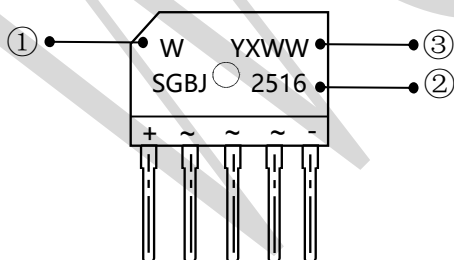


PACKAGE OUTLINE DIMENSIONS

Dimensions in inches (mm)



Marking Information



①W : Company's trademark

②Product model : SGBJ2516

③PDC information :

Y X WW

WW:Week code(01 to 53)

X:Internal identification code

Y:Year code(ex:0=2020)