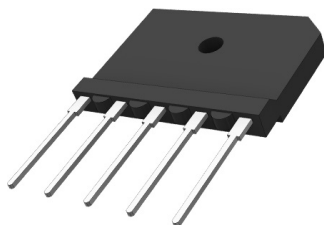


# Glass Passivated 3 Phase Bridge Rectifier

**multicomp** PRO



## 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%

Voltage Ratings						Unit
Characteristics	Symbol	SGBJ3508	SGBJ3510	SGBJ3512	SGBJ3516	
Peak Repetitive Voltage	V <sub>RRM</sub>	800	1000	1200	1600	V
Peak Non-Repetitive Reverse Voltage	V <sub>RSM</sub>	900	1100	1300	1700	
Forward Conduction						
Characteristics	Symbol	SGBJ35 Series				Unit
Maximum Average Forward Rectified Current @T <sub>c</sub> = 110°C	I <sub>F(AV)</sub>	35				A
Peak Forward Surge Current t=8.3ms at 60Hz	I <sub>FSM</sub>	400				
I <sup>2</sup> t Rating for fusing	I <sup>2</sup> t	660				A <sup>2</sup> S
Maximum Forward Voltage drop per element at 17.5A Peak	V <sub>F</sub>	1.1				V
Reverse peak current V <sub>R</sub> =V <sub>RRM</sub> @T <sub>J</sub> =25°C V <sub>R</sub> =V <sub>RRM</sub> @T <sub>J</sub> =150°C	I <sub>R</sub>	5 3				μA mA
RMS Isolation Voltage from Case to Lead	V <sub>ISO</sub>	2500				V
Typical Thermal Resistance (Note1)	R <sub>θJC</sub>	0.8				°C/W
Mounting torque M3	M <sub>d</sub>	0.8				N.m
Weight	W <sub>t</sub>	10				g
Thermal Characteristics						
Operating Temperature Range	T <sub>J</sub>	-55 to +150				°C
Storage Temperature Range	T <sub>STG</sub>					

Notes: 1. Thermal resistance junction to case.

2. The typical data above is for reference only

Newark.com/multicomp-pro  
Farnell.com/multicomp-pro  
Element14.com/multicomp-pro

**multicomp** PRO

# Glass Passivated 3 Phase Bridge Rectifier

## Rating and Characteristic Curves

FIG.1-FORWARD CURRENT DERATING CURVE

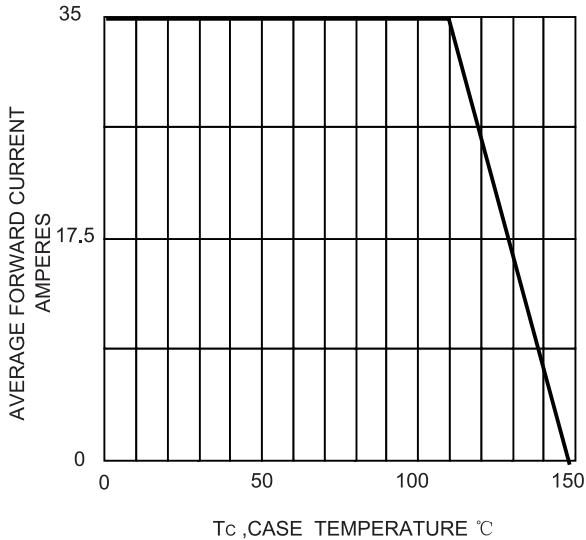


FIG.2-TYPICAL FORWARD CHARACTERISTICS

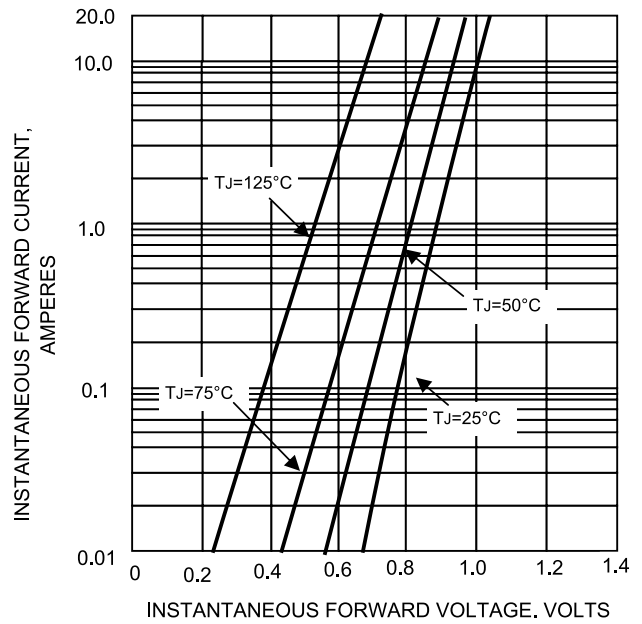


FIG.3-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

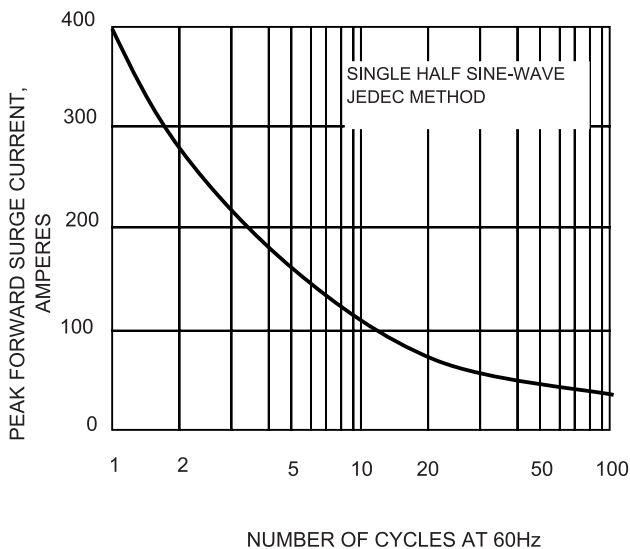
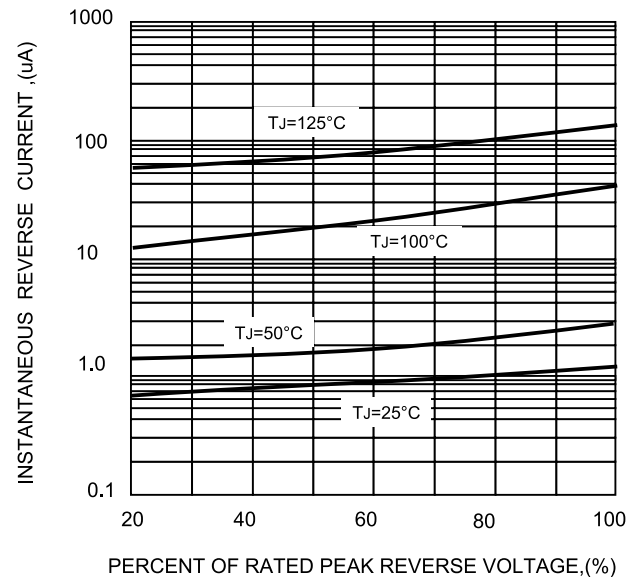


FIG.4-TYPICAL REVERSE CHARACTERISTICS

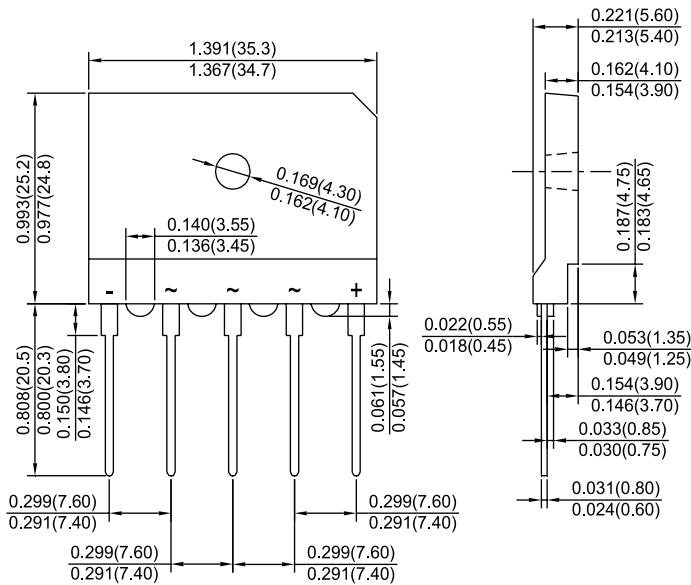


# Glass Passivated 3 Phase Bridge Rectifier

**multicomp** PRO

Dimension:

**SGBJ**



Dimensions : Inches (Millimetres)

## Part Number Table

Description	Part Number
Three Phase Bridge Flat Type 35A 800V SGBJ Package	SGBJ3508
Three Phase Bridge Flat Type 35A 1000V SGBJ Package	SGBJ3510
Three Phase Bridge Flat Type 35A 1200V SGBJ Package	SGBJ3512
Three Phase Bridge Flat Type 35A 1600V SGBJ Package	SGBJ3516

**Important Notice :** This data sheet and its contents (the "Information") belong to the members of the AVNET group of companies (the "Group") or are licensed to it. No licence is granted for the use of it other than for information purposes in connection with the products to which it relates. No licence of any intellectual property rights is granted. The Information is subject to change without notice and replaces all data sheets previously supplied. The Information supplied is believed to be accurate but the Group assumes no responsibility for its accuracy or completeness, any error in or omission from it or for any use made of it. Users of this data sheet should check for themselves the Information and the suitability of the products for their purpose and not make any assumptions based on information included or omitted. Liability for loss or damage resulting from any reliance on the Information or use of it (including liability resulting from negligence or where the Group was aware of the possibility of such loss or damage arising) is excluded. This will not operate to limit or restrict the Group's liability for death or personal injury resulting from its negligence. Multicomp Pro is the registered trademark of Premier Farnell Limited 2019.

Newark.com/multicomp-pro  
Farnell.com/multicomp-pro  
Element14.com/multicomp-pro

**multicomp** PRO