

Glass Passivated 3 Phase Bridge Rectifier



Features

- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability
- Ideal for printed circuit boards

Mechanical Data

Case	: Epoxy case with heat sink laterally mounted in the bridge encapsulation
Terminals	: Plated leads solderable per MIL-STD-202, Method 208
Polarity	: As Marked on Body
Weight	: 21 grams(approx.)
Mounting Position	: Bolt down on heatsink with silicone thermal compound between bridge and mounting surface for maximum heat transfer efficiency.
Mounting Torque	: 2 N.m

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	SMT3508GW	SMT3510GW	SMT3512GW	SMT3514GW	SMT3516GW	
Peak Repetitive Voltage	V_{RRM}						V
Working Peak Reverse Voltage	V_{RWM}	800	1000	1200	1400	1600	
DC Blocking Voltage	V_R						
Peak Non-Repetitive Reverse Voltage	V_{RSM}	900	1100	1300	1500	1700	
RMS Reverse Voltage	$V_{R(RMS)}$	560	700	840	980	1120	
Forward Conduction							
Characteristics	Symbol	SMT35GW Series					Unit
Maximum Average Forward Rectified Current @ $T_c = 55^\circ C$	I_o	35					A
Peak Forward Surge Current $t=8.3ms$ at 60Hz	I_{FSM}	360					
I^2t Rating for fusing	I^2t	840					A ² S
Maximum Forward Voltage drop per element at 17.5A Peak	V_F	1.1					V
Reverse peak current $V_R=V_{RRM}@T_J=25^\circ C$ $V_R=V_{RRM}@T_J=150^\circ C$	I_R	5 3					μA mA
RMS isolation Voltage from case to lead	V_{ISO}	2500					V
Thermal Characteristics							
Operating Temperature Range	T_J	-40 to +150					°C
Storage Temperature Range	T_{STG}	-40 to +125					

www.element14.com
www.farnell.com
www.newark.com



Glass Passivated 3 Phase Bridge Rectifier



Rating and Characteristic Curves

FIG.1-MAXIMUM FORWARD SURGE CURRENT

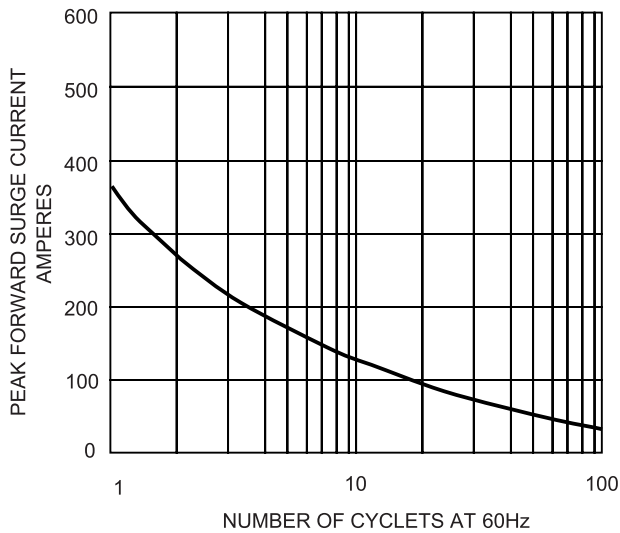


FIG.2- DERATING CURVE OUTPUT RECTIFIED CURRENT

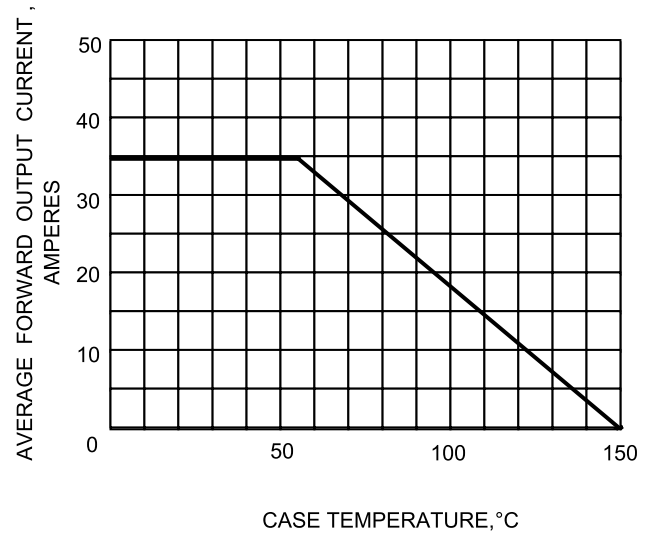


FIG.3-TYPICAL FORWARD CHARACTERISTICS

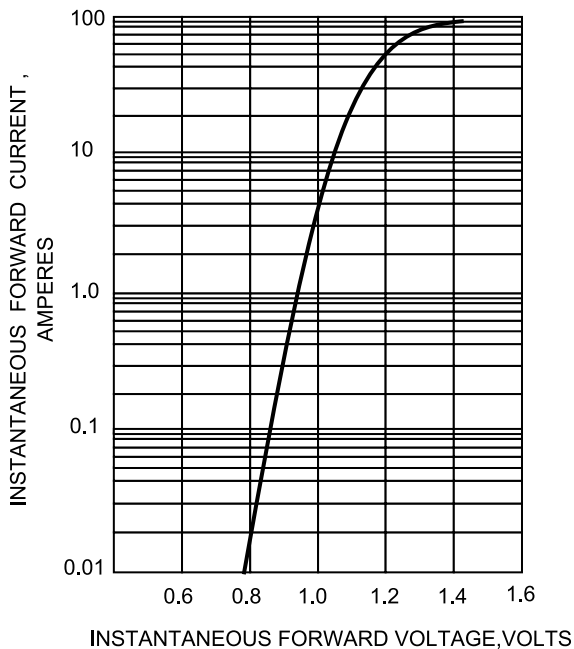
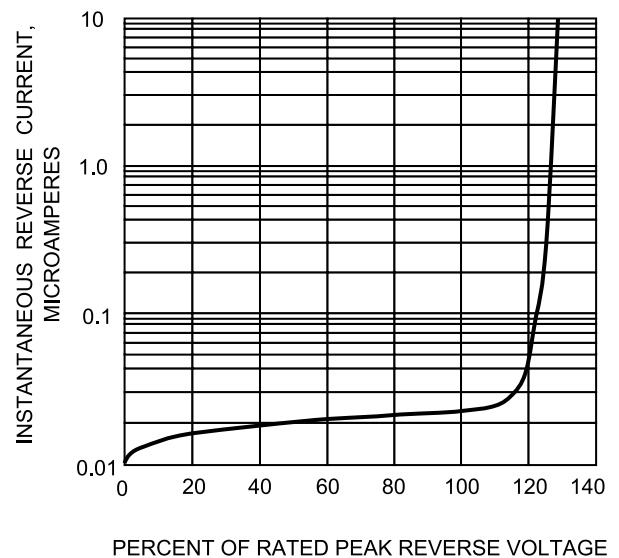


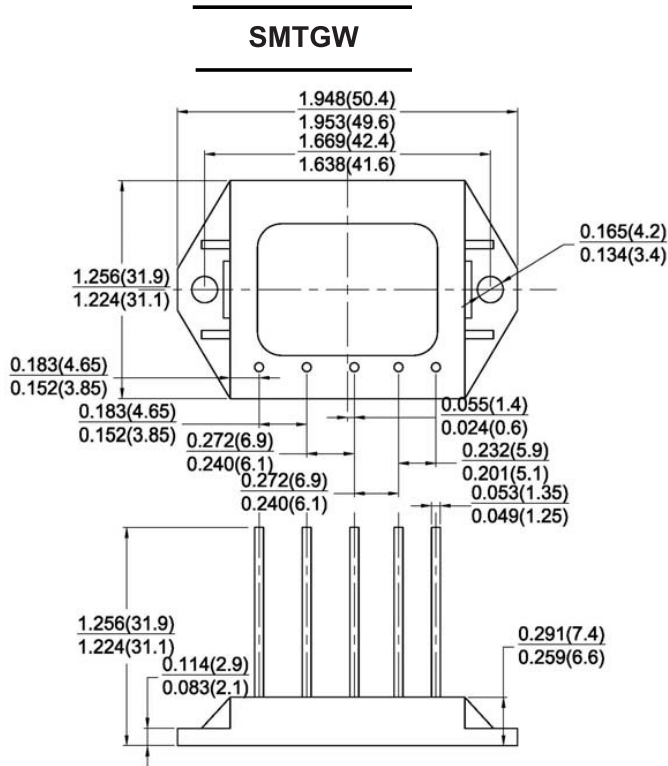
FIG.4-TYPICAL REVERSE CHARACTERISTICS



Glass Passivated 3 Phase Bridge Rectifier



Dimension:



Dimensions : Inches (Millimetres)

Part Number Table

Description	Part Number
Three Phase Bridge 35A 800V SMTGW Package	SMT3508GW
Three Phase Bridge 35A 1000V SMTGW Package	SMT3510GW
Three Phase Bridge 35A 1200V SMTGW Package	SMT3512GW
Three Phase Bridge 35A 1400V SMTGW Package	SMT3514GW
Three Phase Bridge 35A 1600V SMTGW Package	SMT3516GW

Important Notice : This data sheet and its contents (the "Information") belong to the members of the Premier Farnell 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 is the registered trademark of the Group. © Premier Farnell Limited 2016.

www.element14.com
www.farnell.com
www.newark.com

