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**	**SMT2508GW**	**SMT2510GW**	**SMT2512GW**	**SMT2514GW**	**SMT2516GW**	
Peak Repetitive Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	800	1000	1200	1400	1600	V
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**	**SMT25GW Series**					**Unit**
Maximum Average Forward Rectified Current @T_C = 55°C	I_O	25					A
Peak Forward Surge Current t=8.3ms at 60Hz	I_{FSM}	320					
I^2t Rating for fusing	I^2t	840					A^2S
Maximum Forward Voltage drop per element at 12.5A Peak	V_F	1.1					V
Reverse peak current $V_R=V_{RRM}$@T_J=25°C $V_R=V_{RRM}$@T_J=150°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					

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Rating and Characteristic Curves

FIG.1-MAXIMUM FORWARD SURGE CURRENT

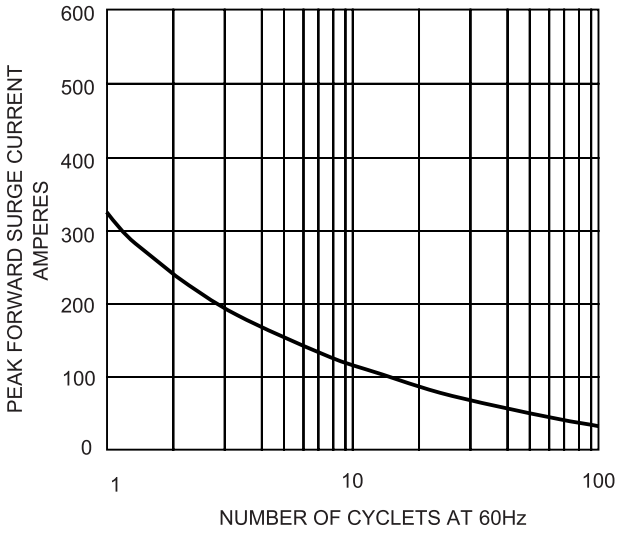


FIG.2- DERATING CURVE OUTPUT
RECTIFIED CURRENT

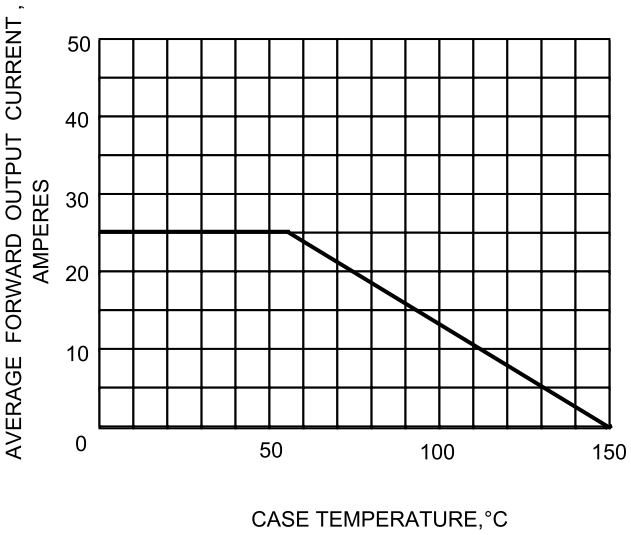


FIG.3-TYPICAL FORWARD CHARACTERISTICS

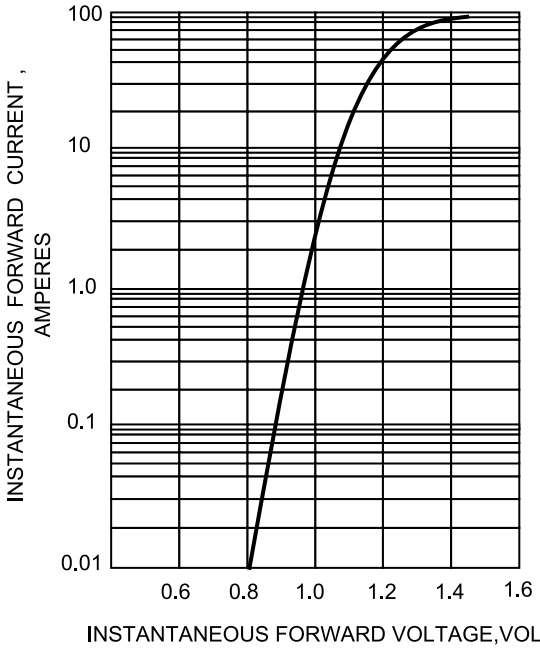
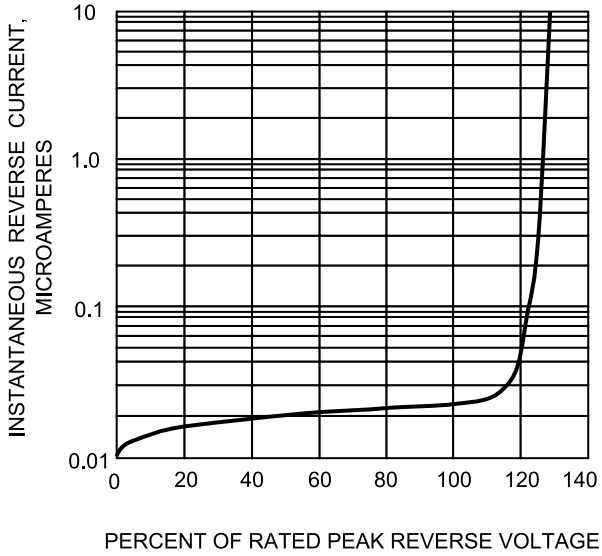


FIG.4-TYPICAL REVERSE CHARACTERISTICS



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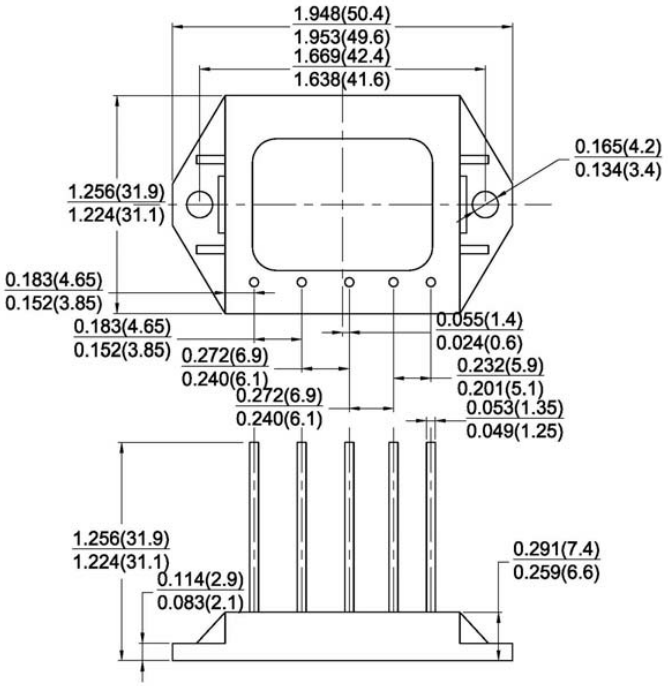
Dimension:

SMTGW



Dimensions : Inches (Millimetres)

Part Number Table

Description	Part Number
Three Phase Bridge 25A 800V SMTGW Package	SMT2508GW
Three Phase Bridge 25A 1000V SMTGW Package	SMT2510GW
Three Phase Bridge 25A 1200V SMTGW Package	SMT2512GW
Three Phase Bridge 25A 1400V SMTGW Package	SMT2514GW
Three Phase Bridge 25A 1600V SMTGW Package	SMT2516GW