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							
Characteristics	Symbol	SMT3508GW	SMT3510GW	SMT3512GW	SMT3514GW	SMT3516GW	Unit
Peak Repetitive Voltage Working Peak Reverse Voltage DC Blocking Voltage	VRRM VRWM VR	800	1000	1200	1400	1600	V
Peak Non-Repetitive Reverse Voltage	Vrsm	900	1100	1300	1500	1700	
RMS Reverse Voltage	VR(RMS)	560	700	840	980	1120	
Forward Conduction							
Characteristics	Symbol	SMT35GW Series					Unit
Maximum Average Forward Rectified Current @Tc = 55°C	lo	35					А
Peak Forward Surge Current t=8.3ms at 60Hz	IFSM	360					
I2t Rating for fusing	l ² t	840					A ² S
Maximum Forward Voltage drop per element at 17.5A Peak	VF	1.1					V
Reverse peak current VR=VRRM@TJ=25°C VR=VRRM@TJ=150°C	lR	5 3					μA mA
RMS isolation Voltage from case to lead	Viso	2500					V
Thermal Characteristics							
Operating Temperature Range	TJ	-40 to +150 -40 to +125					°C
Storage Temperature Range	Tstg						

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Rating and Characteristic Curves

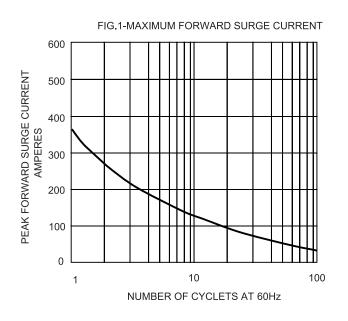


FIG.2- DERATING CURVE OUTPUT RECTIFIED CURRENT

50

40

40

40

50

10

50

CASE TEMPERATURE,°C

FIG.3-TYPICAL FORWARD CHARACTERISTICS

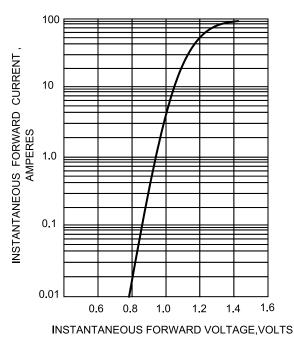
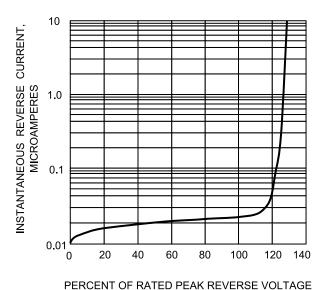


FIG.4-TYPICAL REVERSE CHARACTERISTICS



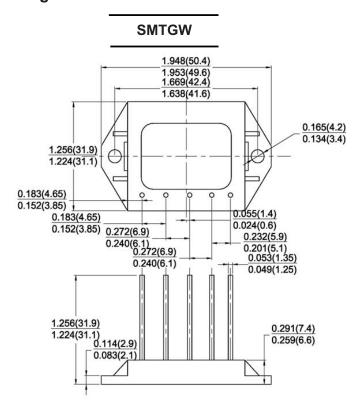
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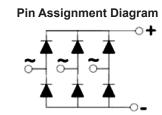


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Diagram





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		

Dimensions: Inches (Millimetres)

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