

# 3GBJ3508 THRU 3GBJ3516

RoHS

HALOGEN

# 35A, 800V to 1600V Three Phase Glass Passivated Bridge Rectifiers

FEATURES 3GBJ

- Glass passivated chip junction
- High surge current capability
- Low reverse leakage current
- High temperature soldering guaranteed: 270 ℃±5 ℃/10 seconds
- RoHS compliant

## **MECHANICAL DATA**

- Case: 3GBJ

- Case material: molding compound meets UL 94V-0 flammability rating

- Plolarity: as marked on case



#### TYPICAL APPLICATION

General purpose use in Household electric appliances, industrial power supply, industrial automation equipment, Electric welding machine, etc.

## **MAXIMUM RATINGS**

 $T_A$ =25°C unless otherwise noted

Parameter	Symbol	3GBJ 3508	3GBJ 3510	3GBJ 3512	3GBJ 3514	3GBJ 3516	Unit
Repetitive Peak Reverse Voltage	$V_{RRM}$	800	1000	1200	1400	1600	V
Average Forward Rectified Current (Wwith heatsink,T <sub>C</sub> =85℃)	I <sub>F(AV)</sub>			25			Α
Peak Forward Surge Current (8.3ms single half sine-wave superimposed on rated load)	I <sub>FSM</sub>	450				А	
Rating for Fusing (1ms <t<8.3ms,tj=25°c,rating diode)<="" of="" per="" td=""><td>l<sup>2</sup>t</td><td colspan="2">840</td><td>A<sup>2</sup>s</td></t<8.3ms,tj=25°c,rating>	l <sup>2</sup> t	840		A <sup>2</sup> s			
Operating Junction Temperature Range	T <sub>J</sub> -55 to +150			$^{\circ}$			
Storage Temperature Range	T <sub>STG</sub>	-55 to +150			${\mathbb C}$		

#### **ELECTRICAL CHARACTERISTICS**

 $T_A$ =25°C unless otherwise noted

Parameter	Test Conditions	Symbol	Value	Unit	
Peak Forward Voltage@I <sub>F</sub> =17.5A (Pulse measurement,Rate of per diode)		V <sub>F</sub>	1.1	V	
Reverse Current@V <sub>R</sub> =V <sub>RRM</sub>	T <sub>J</sub> =25℃	1_	5		
(Pulse measurement,Rate of per diode)	T <sub>J</sub> =125℃	l <sub>R</sub>	500	μΑ	
Typical Thermal Resistance	without heatsink	$R_{ heta JA}$	14	°C/W	
	with heatsink	$R_{\theta JC}$	0.75		



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# **RATINGS AND CHARACTERISTICS CURVES**

FIG.1 Derating Curve For Output Rectified Current

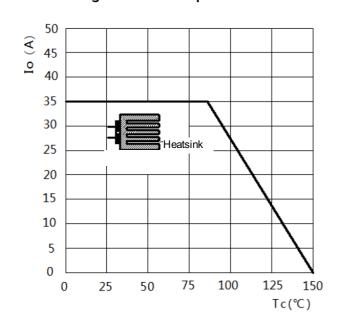


FIG.2 Maximum Non-Repetitive Peak Forward Surge Cuurent

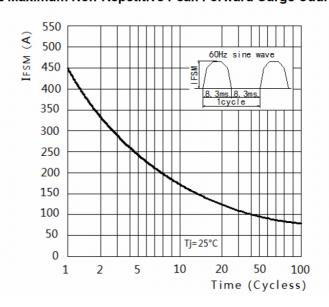


FIG.3 Typical Reverse Characteristics

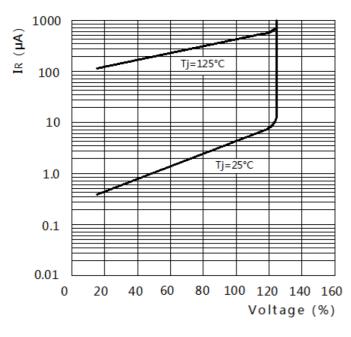
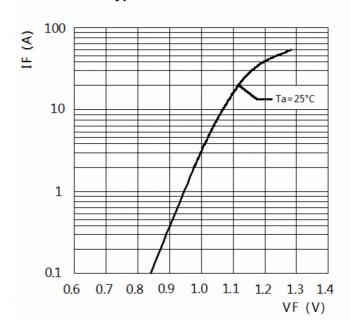


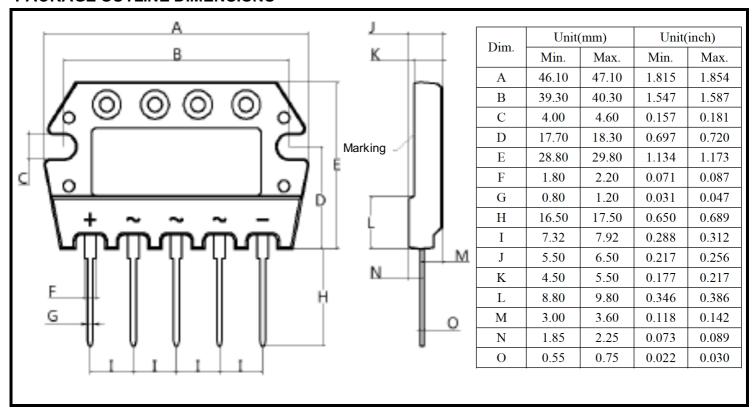
FIG.4 Typical Forward Characteristics



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## **PACKAGE OUTLINE DIMENSIONS**



## **PACKING INFORMATION**

Package	Inner Box (PCS)	Carton (PCS)		
3GBJ	150	1,500		

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