

UG2KB05 THRU UG2KB100

Single Phase 2.0AMP Glass Passivated Bridge Rectifier

Features

· Glass passivated die construction

Low forward voltage drop

High current capability

· High surge current capability

Plastic material-UL flammability 94V-0

Mechanical Data

· Case: D3K,molded plastic

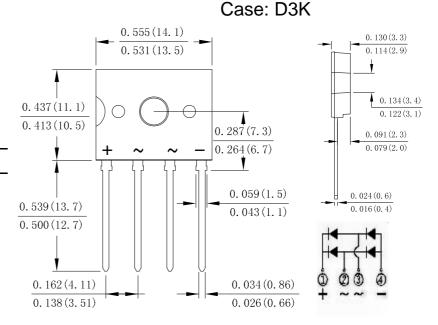
 Terminal: Plated leads solderable per MIL-STD 202, Method 208

Polarity: As Marked on case

Mounting Position:Any

· Marking: Type Number

· Lead Free: For RoHS/Lead Free Version



Dimiensions in inches and (milimeters)

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%

TYPE NUMBER	SYMBOL	UG2K B05	UG2K B10	UG2K B20	UG2K B40	UG2K B60	UG2K B80	UG2K B100	UNIT
Peak Repetitive Reverse	V_{RRM}								
Voltage Working Peak Reverse	V_{RWM}	50	100	200	400	600	800	1000	V
Voltage DC Blocking Voltage	V_{DC}								
RMS Reverse Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Average Rectified Without heat sink $@T_c=90^{\circ}C$ Output Current With heat sink $@T_c=90^{\circ}C$	I _{F(AV)}	1.0 2.0							Α
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	60							А
10000 times of the wave surge current (time width1ms, time interval 3s)	I _{FSM}	42							А
I ² t Rating for Fusing (t < 8.3ms)	l²t	14.94						A ² s	
Forward Voltage per element @IF=2.0A	V_{FM}	1.1							V
Maximum DC reverse current at T _J =25℃ rated DC blocking voltage per leg T _J =125℃	I _R	5.0 200							uA
Dielectric Strength	Vids	2000						V	
The proposed installation torque Max torque	Tor	5.0 8.0							Kgf.cm
Typical Junction Capacitance	CJ	25							pF
Typical thermal resistance	$R_{\theta JA}$	A 55							°C/W
	$R_{\theta JL}$	15							
Operating and Storage Temperature Range	T_{J} , T_{STG}	-55 to +150							$^{\circ}$

version:06 1 of 3



Fig. 1 Forward Current Derating Curve

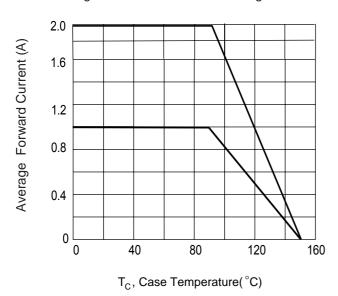


Fig.3 Maximum Peak Forward Surge Current

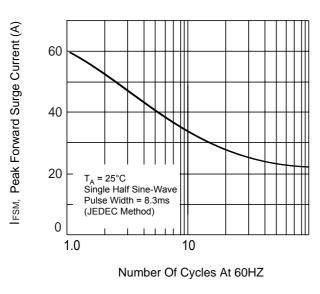
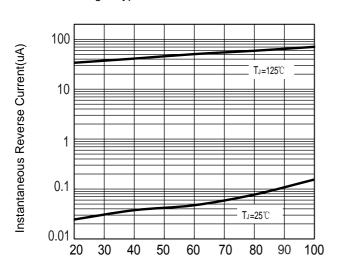


Fig.5 Typical Reverse Characteristics



Percent Of Rated Peak Reverse Voltage(%)



0.01

0.2

0.4

0.6

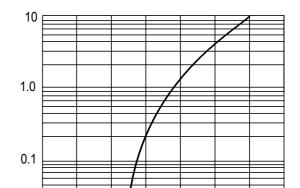


Fig. 2 Typ. Forward Characteristics

V_F, Instantaneous Forward Voltage (V)

1.0

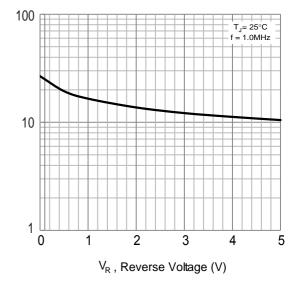
Pulse Width = 300µs

1.2

Fig . 4 Typical Junction Capacitance

8.0





version:06 2 of 3



UG2KB05 THRU UG2KB100

Single Phase 2.0AMP Glass Passivated Bridge Rectifier

Important Notice and Disclaimer

- Reproducing and modifying information of the document is prohibited without permission from XINNUO
- XINNUO reserves the right to make changes to this document and its products and specifications
- XINNUO disclaims any and all liability arising out of the application or use of any product including damages incidentally and consequentially occurred.
- XINNUO does not assume any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.
- Applications shown on the here in document are examples of standard use and operation. Customers are responsible in comprehending the suitable use in particular applications.
 - XINNUO makes no representation or warranty that such applications will be suitable for the specified use without further testing or modification.
- The products shown here in are not designed and authorized for equipments requiring high level of reliability or relating to human life and for any applications concerning life-saving or life-sustaining, such as medical instruments, transportation equipment, aerospace machinery et cetera. Customers using or selling these products for use in such applications do so at their own ris k andagree to fully indemnify XINNUO for any damages resulting from such improper use or sale.
- Since XINNUO uses lot number as the tracking base, please provide the lot number for tracking when complaining.

version:06 3 of 3