



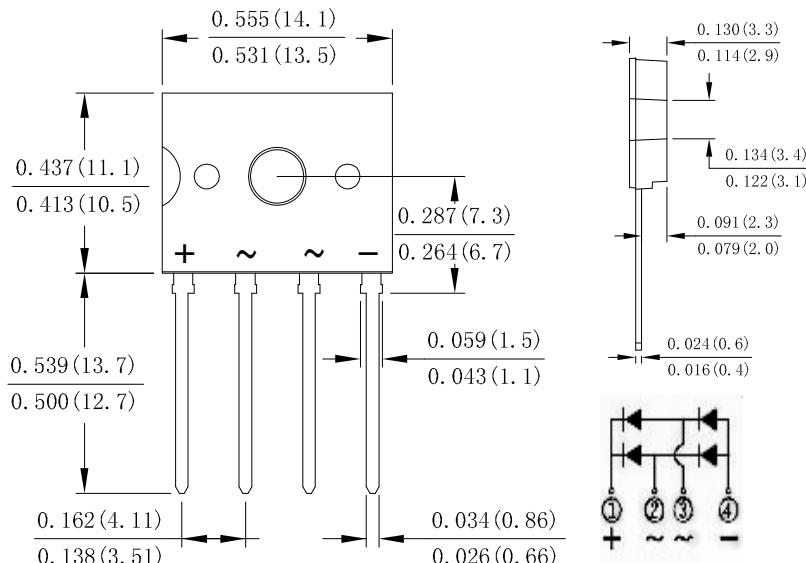
# UG8KB05A THRU UG8KB100A

Single Phase 8.0AMP Glass Passivated Bridge Rectifier

## Features

- Glass passivated die construction
- High surge current capability
- High surge current capability
- Plastic material-UL flammability 94V-0

## Case: D3K



Dimensions in inches and (millimeters)

## 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

## 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	UG8K B05A	UG8K B10A	UG8K B20A	UG8K B40A	UG8K B60A	UG8K B80A	UG8K B100A	UNIT
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
	$V_{RWM}$								
	$V_{DC}$								
RMS Reverse Voltage	$V_{RMS}$	35	70	140	280	420	560	700	V
Average Rectified Output Current Without heat sink @ $T_c=90^\circ C$ With heat sink @ $T_c=90^\circ C$	IF(AV)				4.0	8.0			A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$				150				A
$I^2t$ Rating for Fusing (t < 8.3ms)	$I^2t$				93.375				$A^2s$
Forward Voltage per element @IF=8.0A	$V_{FM}$				1.1				V
Maximum DC reverse current at $T_J=25^\circ C$ rated DC blocking voltage per leg $T_J=125^\circ C$	$I_R$				5.0	500			$\mu A$
Dielectric Strength	Vids				2500				V
The proposed installation torque Max torque	Tor				5.0	8.0			$Kgf.cm$
Typical Junction Capacitance(Note 1)	$C_J$				45				pF
Typical thermal resistance	$R_{\theta JA}$				55				$^\circ C/W$
	$R_{\theta JL}$				15				
Operating and Storage Temperature Range	$T_J, T_{STG}$				-55 to +150				°C

Note: 1. Device mounted on 50mm\*50mm\*1.6mm Cu plate heatsink.



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Fig. 1 Forward Current Derating Curve

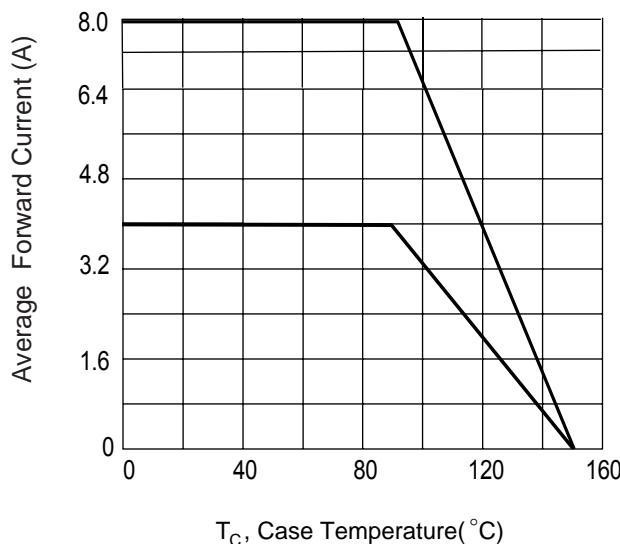


Fig. 2 Typ. Forward Characteristics

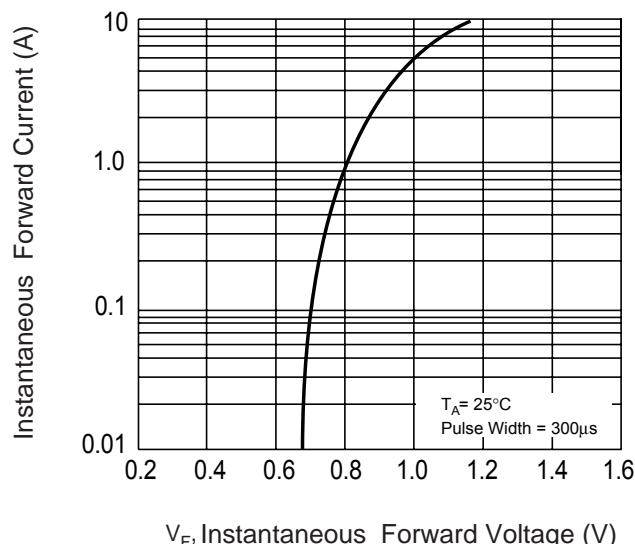


Fig.3 Maximum Peak Forward Surge Current

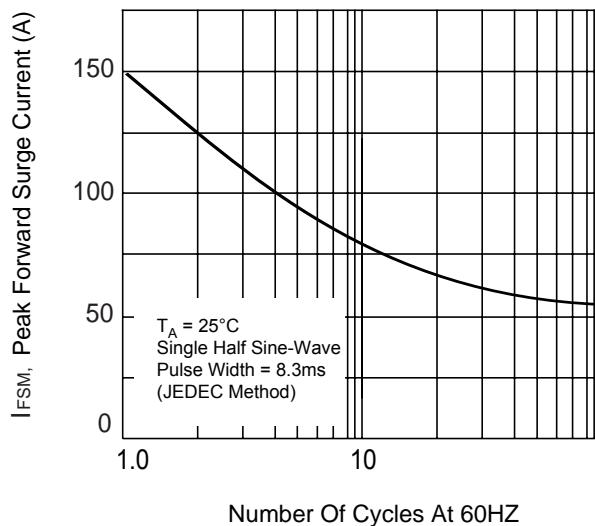


Fig. 4 Typical Junction Capacitance

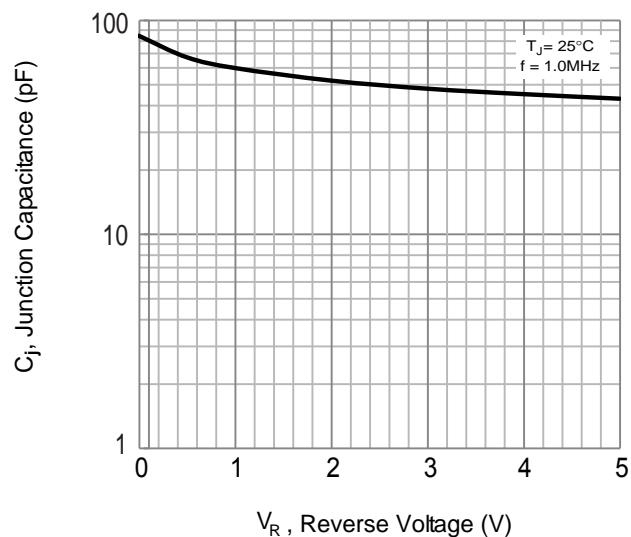
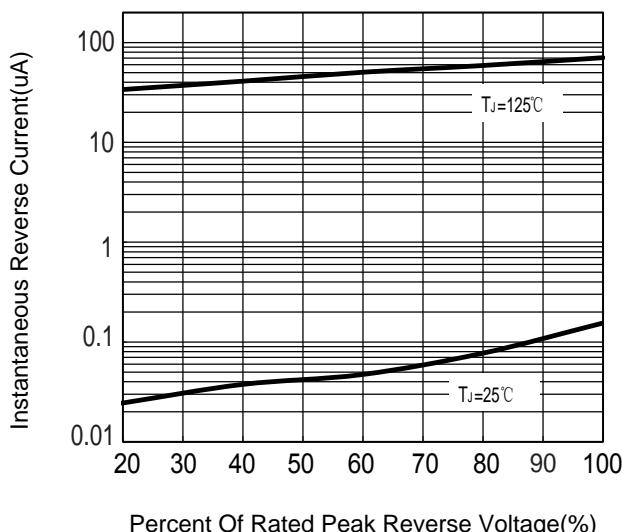


Fig.5 Typical Reverse Characteristics





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