

UG3KB05 THRU UG3KB100

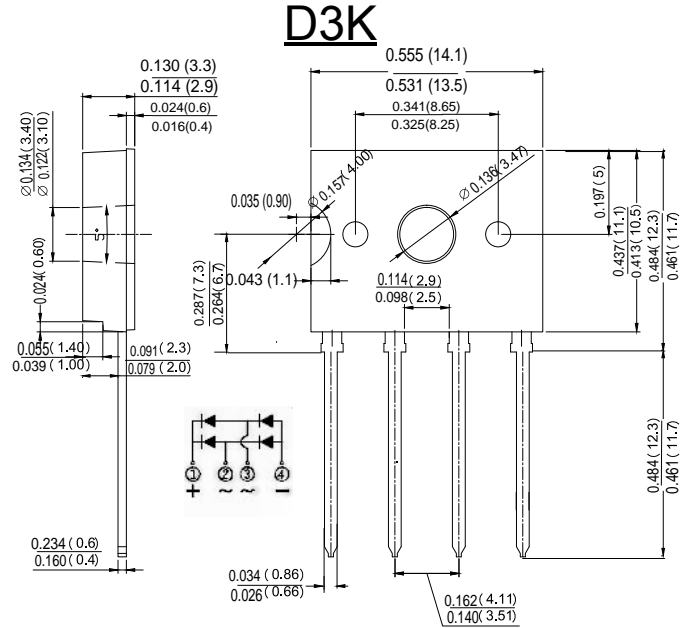
SINGLE PHASE 3.0AMP GLASS PASSIVATED BRIDGE RECTIFIER

Features

- Glass passivated die construction
- Low forward voltage drop
- High current capability
- High surge current capability
- Designed for surface mount application
- 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



Dimensions in inches and (millimeters)

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	UG3K B05	UG3K B10	UG3K B20	UG3K B40	UG3K B60	UG3K B80	UG3K B100	UNIT	
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM}								V	
	V_{RWM}	50	100	200	400	600	800	1000		
	V_{DC}									
RMS Reverse Voltage	V_{RMS}	35	70	140	280	420	560	700	V	
Average Rectified Output Current	$I_{F(AV)}$	Without heat sink @ $T_c=90^\circ\text{C}$				1.5				A
		With heat sink @ $T_c=90^\circ\text{C}$				3.0				
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}					60				A
I ² t Rating for Fusing (t < 8.3ms)	I ² t					14.94				A ² s
Forward Voltage per element @IF=3.0A	V_{FM}					1.1				V
Maximum DC reverse current at $T_A=25^\circ\text{C}$ rated DC blocking voltage per leg $T_A=125^\circ\text{C}$	I_R					5.0				uA
						500				
Typical Junction Capacitance per leg	C_J					21				pF
Typical thermal resistance per leg(Note 1)	$R_{\theta JA}$					55				°C/W
	$R_{\theta JL}$					15				
Operating and Storage Temperature Range	T_J, T_{STG}					-55 to +150				°C

Note:1. Measured at 1.0 MHZ and applied reverse voltage of 4.0VD.C.

Fig. 1 Output Current Derating Curve

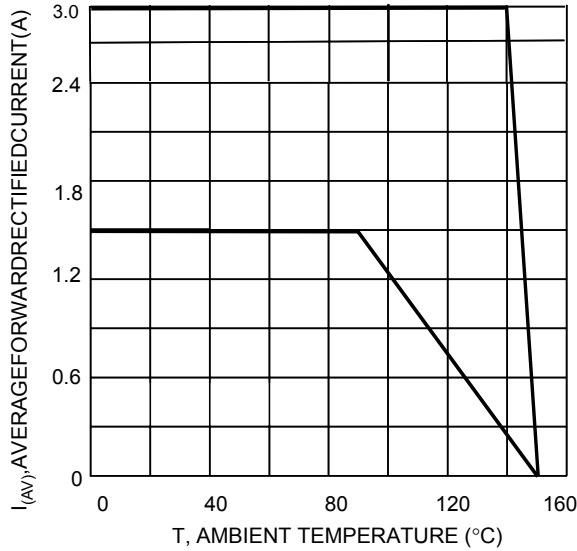


Fig. 2 Typical I Forward Characteristics (per leg)

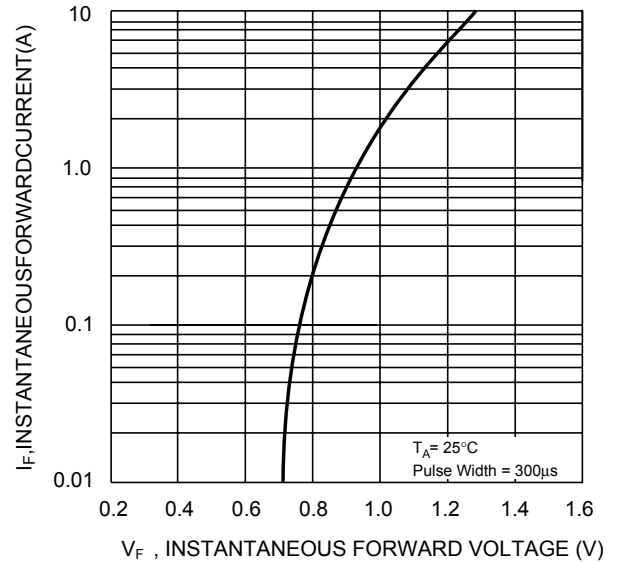


Fig. 3 Maximum Peak Forward Surge Current (per leg)

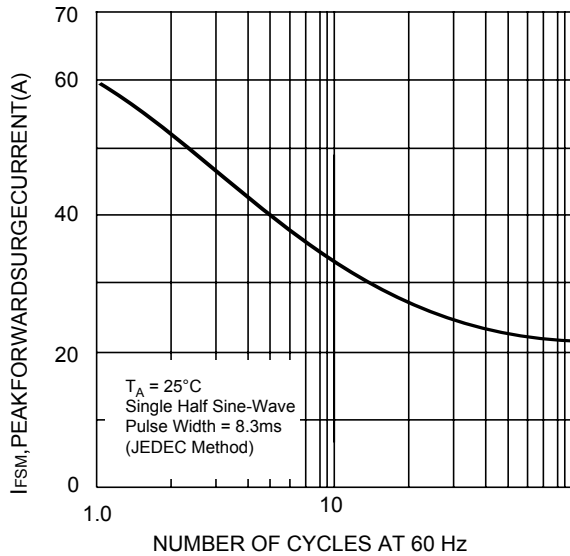


Fig. 4 Typical Junction Capacitance Per Diode

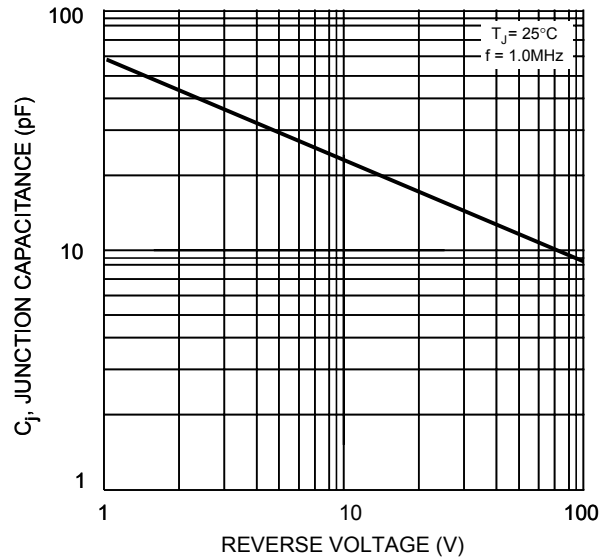
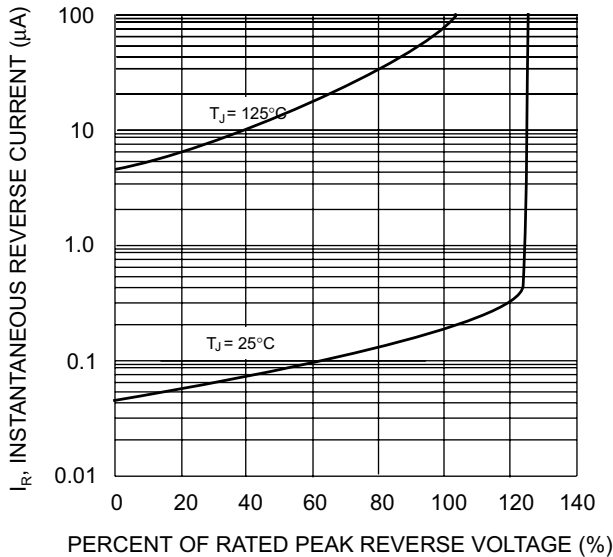


Fig. 5 Typical Reverse Characteristics (per element)



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