

UG4KB05A THRU UG4KB100A

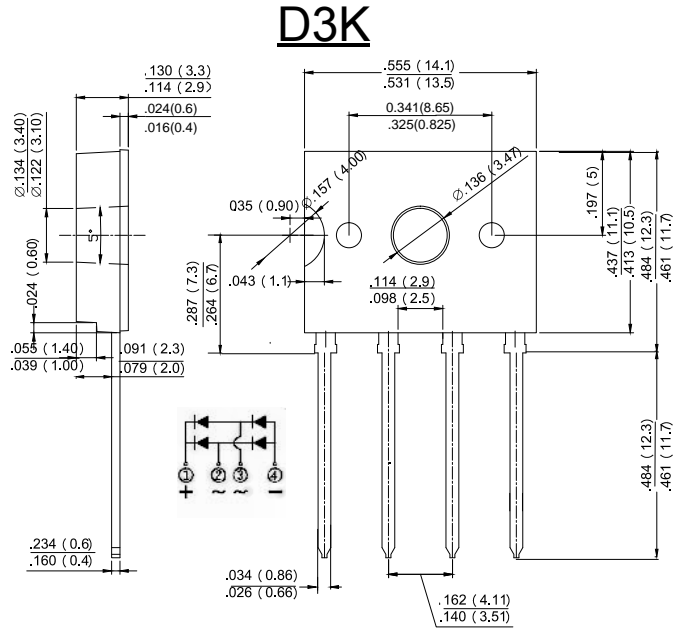
SINGLE PHASE 4.0AMP GLASS PASSIVATED BRIDGE RECTIFIER

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	UG4K B05A	UG4K B10A	UG4K B20A	UG4K B40A	UG4K B60A	UG4K B80A	UG4K B100A	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 Without heat sink @ $T_A=30^\circ\text{C}$ With heat sink @ $T_A=140^\circ\text{C}$	I_o				2.0 4.0				A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}				80				A
Forward Voltage per element @ $I_F=4.0\text{A}$	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				5.0 500				μA
Typical Junction Capacitance per leg	C_J				21				pF
Typical thermal resistance per leg (Note 2)	$R_{\theta JA}$				55				$^\circ\text{C/W}$
	$R_{\theta JL}$				15				
Operating and Storage Temperature Range	T_J, T_{STG}				-55 to +150				$^\circ\text{C}$

Note: 1. Measured at 1.0 MHz and applied reverse voltage of 4.0VDC.

Fig. 1 Output Current Derating Curve

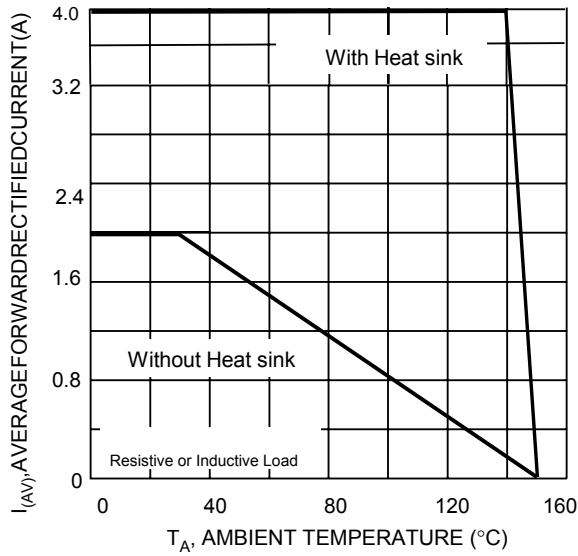


Fig. 2 Typical I Forward Characteristics (per leg)

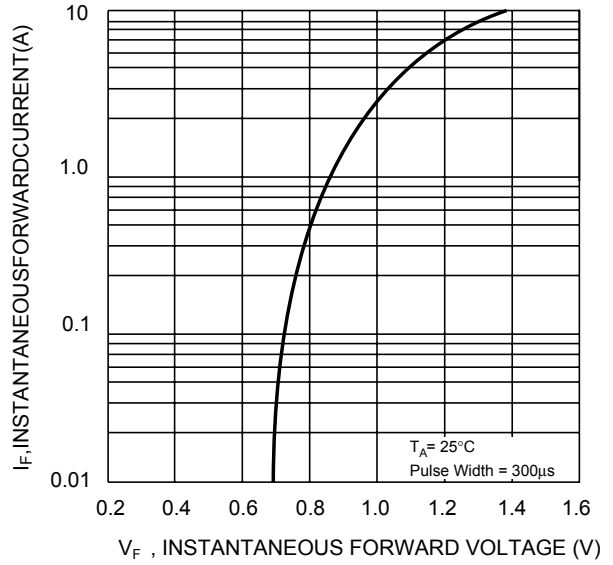


Fig. 3 Maximum Peak Forward Surge Current (per leg)

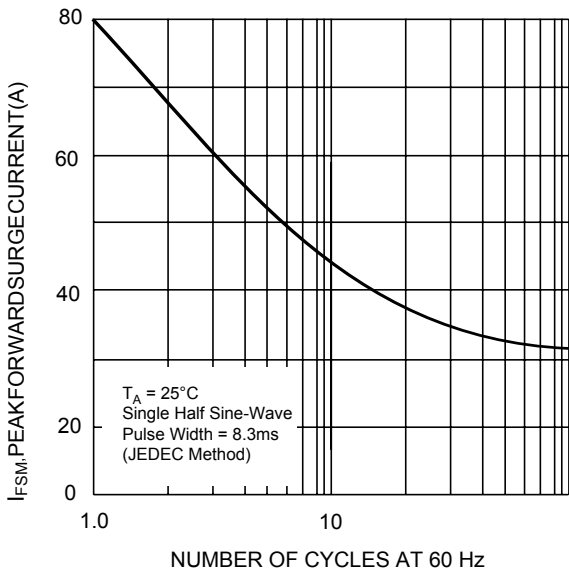


Fig.4 Typical Junction Capacitance Per Diode

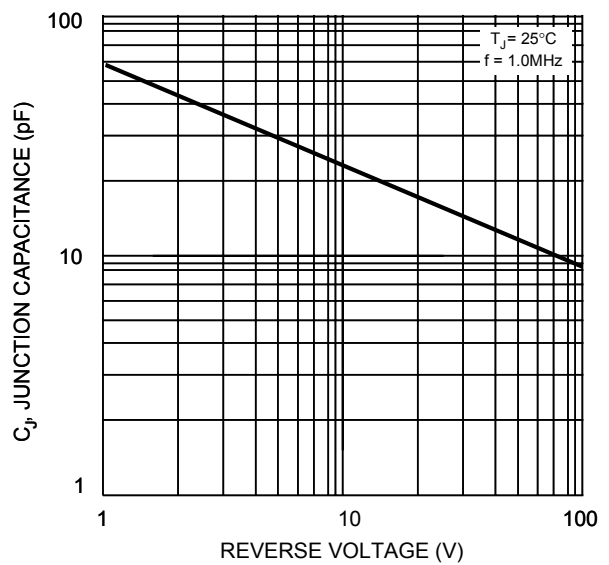


Fig. 5 Typical Reverse Characteristics (per element)

