

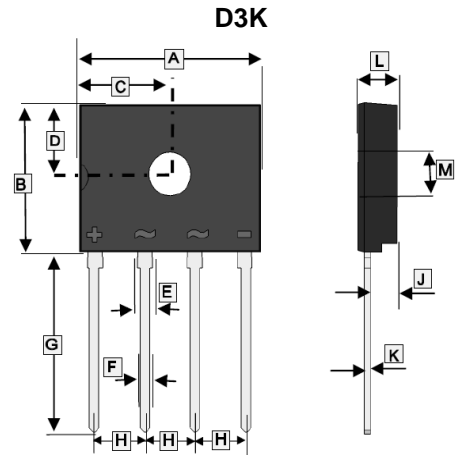
RoHS Compliant Product

**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**

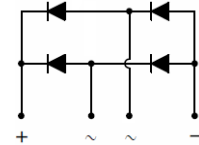
- Case: Molded Plastic, D3K
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: As Marked on Case
- Mounting Position: Any
- Marking: Type Number



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	13.30	14.30	G	13.30	REF.
B	10.30	11.30	H	3.51	4.11
C	6.90	REF.	J	2.00	2.30
D	4.50	5.50	K	0.40	0.60
E	1.25	REF.	L	2.60	3.60
F	0.60	0.86	M	3.10	3.40

**ORDER INFORMATION**

Part Number	Type
UG4KB05~UG4KB100	Lead (Pb)-free
UG4KB05H~UG4KB100H	Lead (Pb)-free and Halogen-free



**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

(Rating 25°C ambient temperature unless otherwise specified. Single phase half wave, 60Hz, resistive or inductive load. For capacitive load, de-rate current by 20%.)

Parameter	Symbol	Part Number							Unit
		UG4 KB05	UG4 KB10	UG4 KB20	UG4 KB40	UG4 KB60	UG4 KB80	UG4K B100	
Peak Repetitive Reverse Voltage	$V_{RRM}$								V
Working Peak Reverse Voltage	$V_{RWM}$	50	100	200	400	600	800	1000	
DC Blocking Voltage	$V_{DC}$								
RMS Reverse Voltage	$V_{RMS}$	35	70	140	280	420	560	700	V
Average Rectified Output Current @ $T_C=90^\circ C$	Without heatsink	2							A
	With heatsink	4							
Non-Repetitive Peak Forward Surge Current, 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	$I_{FSM}$	120							A
$I^2t$ Rating for Fusing ( $t<8.3ms$ )	$I^2t$	59.75							A <sup>2</sup> S
Dielectric Strength	$V_{DIS}$	2.5							KV
The Proposed Installation Torque	Tor	5							Kgf.cm
Max Torque		8							
Forward Voltage per element @ $I_F=4A$	$V_F$	1.1							V
Peak Reverse Current at Rated DC Blocking Voltage per leg	$T_J=25^\circ C$	5							$\mu A$
	$T_J=125^\circ C$	200							
Typical Junction Capacitance <sup>1</sup>	$C_J$	30							pF
Typical Thermal Resistance	$R_{\theta JA}$	55							$^\circ C/W$
	$R_{\theta JL}$	15							
Operating & Storage Temperature Range	$T_J, T_{STG}$	-55~150							$^\circ C$

Note:  
1. Measured at 1MHz and applied reverse voltage of 4V D.C.

**RATINGS AND CHARACTERISTIC CURVES**

Fig. 1 Output Current Derating Curve

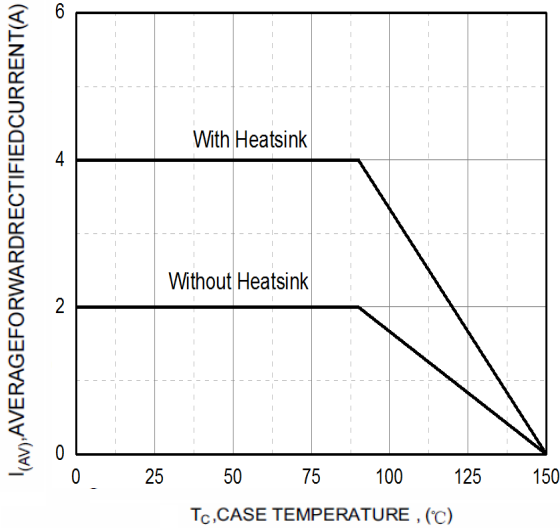


Fig. 2 Typical Forward Characteristics

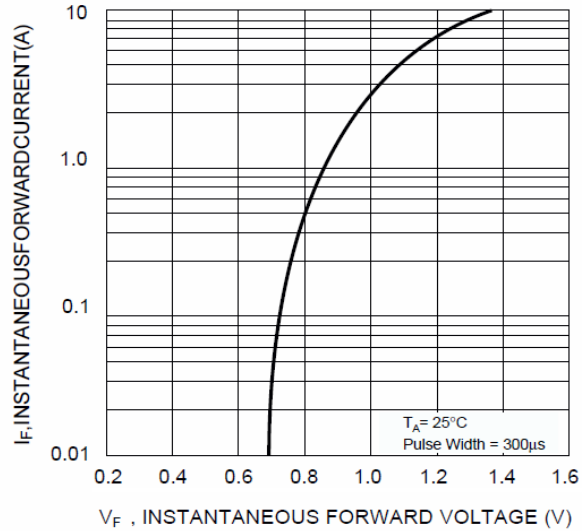


Fig. 3 Maximum Peak Forward Surge Current

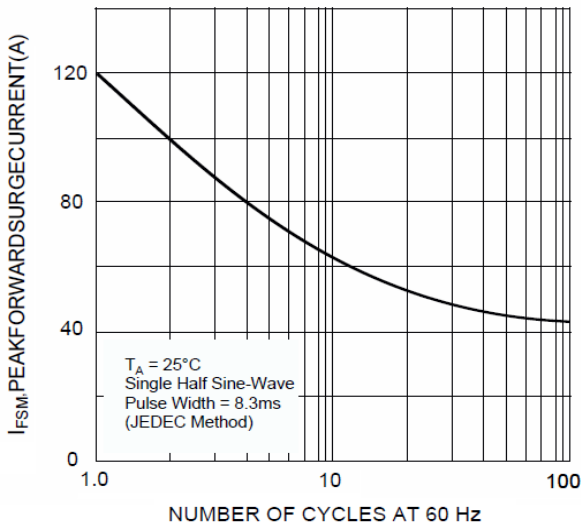


Fig. 4 Typical Junction Capacitance Per Diode

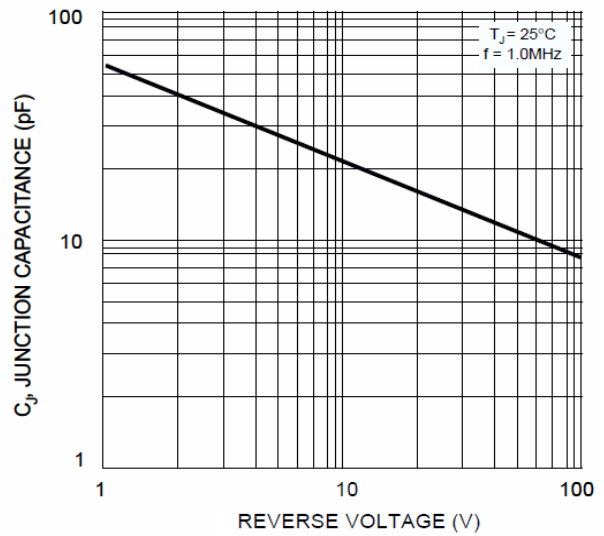


Fig. 5 Typical Reverse Characteristics (per element)

