

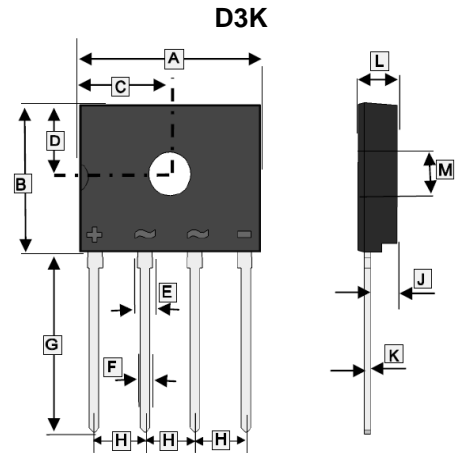
RoHS Compliant Product

FEATURES

- Glass Passivated Die Construction
- High Current Capability
- High Surge Current Capability
- Designed For Surface Mount Application
- Plastic Material-UL Flammability 94V-0

MECHANICAL DATA

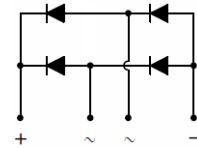
- Case: Molded Plastic, D3K
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: As Marked on Case
- Mounting Position: Any
- Marking: Type Number



ORDER INFORMATION

Part Number	Type
UG8KB05A~UG8KB100A	Lead (Pb)-free
UG8KB05AH~UG8KB100AH	Lead (Pb)-free and Halogen-free

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



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
		UG8K B05A	UG8K B10A	UG8K B20A	UG8K B40A	UG8K B60A	UG8K B80A	UG8K B100A	
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	4							A
	With heatsink	8							
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 ² S
Dielectric Strength	V_{DIS}	2.5							kV
The Proposed Installation Torque	Tor	5							Kgf.cm
Max Torque		8							
Forward Voltage per element @ $I_F=8A$	V_F	1.1							V
Peak Reverse Current at Rated DC Blocking Voltage per leg	$T_J=25^\circ C$	5							μA
	$T_J=125^\circ C$	500							
Typical Junction Capacitance ¹	C_J	45							pF
Typical Thermal Resistance ²	$R_{\theta JA}$	55							$^\circ C/W$
	$R_{\theta JL}$	15							
Operating & Storage Temperature Range	T_J, T_{STG}	-55~150							$^\circ C$

Notes:

1. Device mounted on 50mm*50mm*1.6mm Cu plate heatsink.
2. Measured at 1MHz and applied reverse voltage of 4V D.C.

RATINGS AND CHARACTERISTIC CURVES

Fig. 1 Output Current Derating Curve

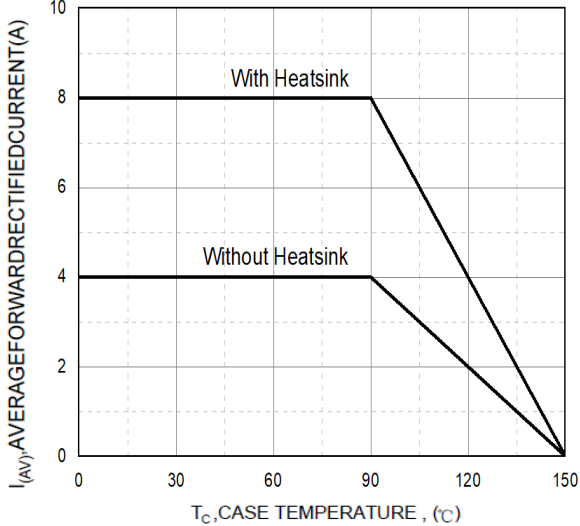


Fig. 2 Typical Forward Characteristics

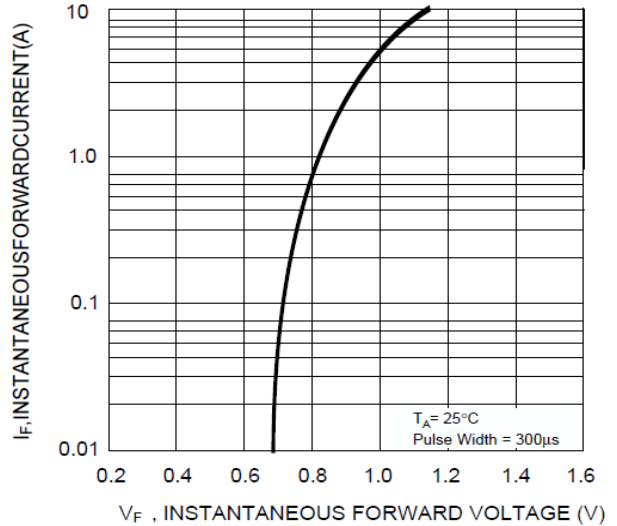


Fig. 3 Maximum Peak Forward Surge Current

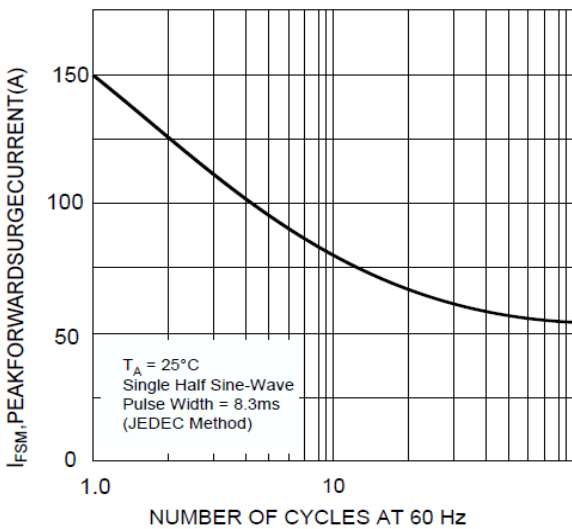


Fig.4 Typical Junction Capacitance Per Diode

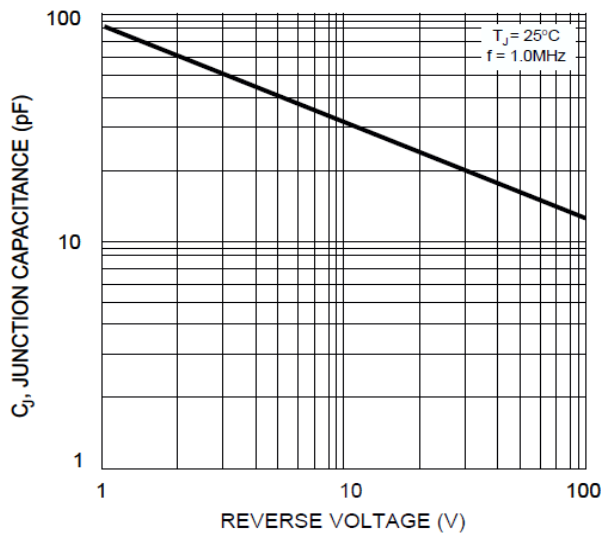


Fig. 5 Typical Reverse Characteristics (per element)

