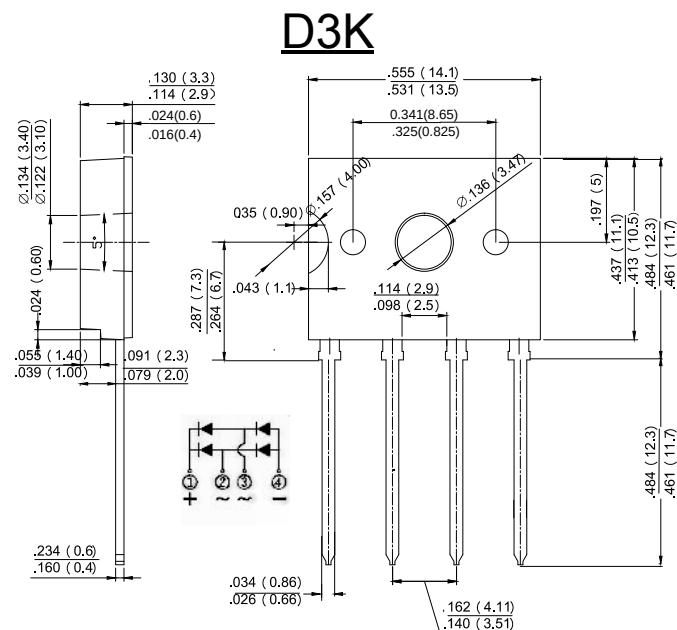


Features

- 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 B05G	UG4K B10G	UG4K B20G	UG4K B40G	UG4K B60G	UG4K B80G	UG4K B100G	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 @ $T_A=30^{\circ}\text{C}$ 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}	150							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 Juntion 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

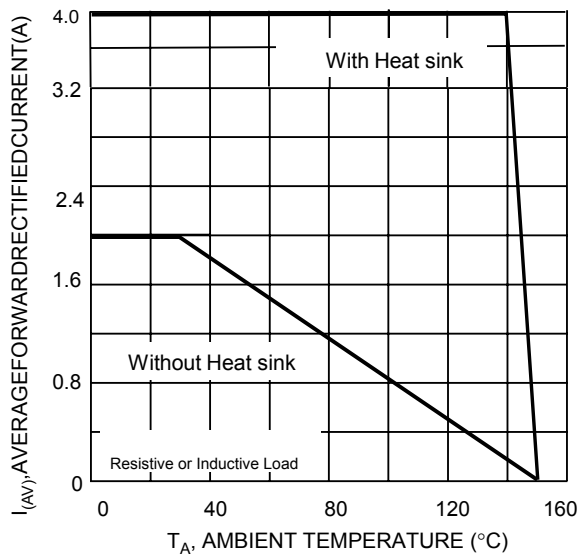


Fig. 2 Typical I Forward Characteristics (per leg)

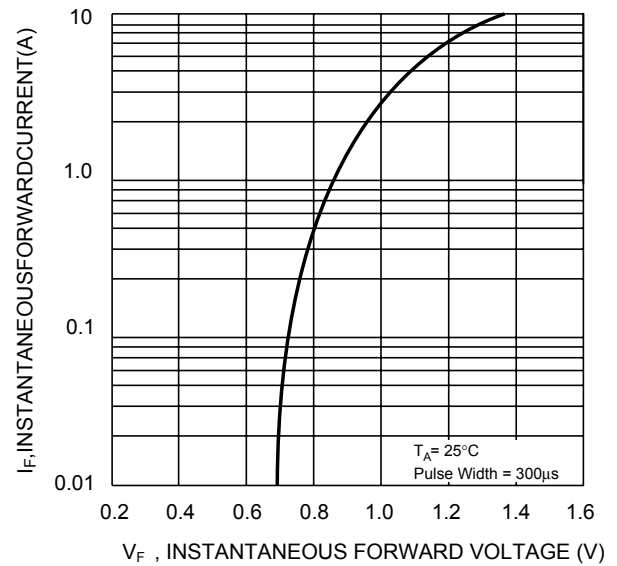


Fig. 3 Maximum Peak Forward Surge Current (per leg)

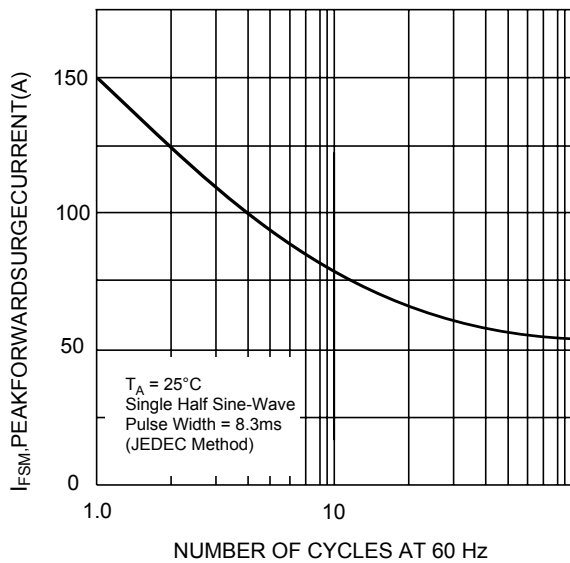


Fig. 4 Typical Junction Capacitance Per Diode

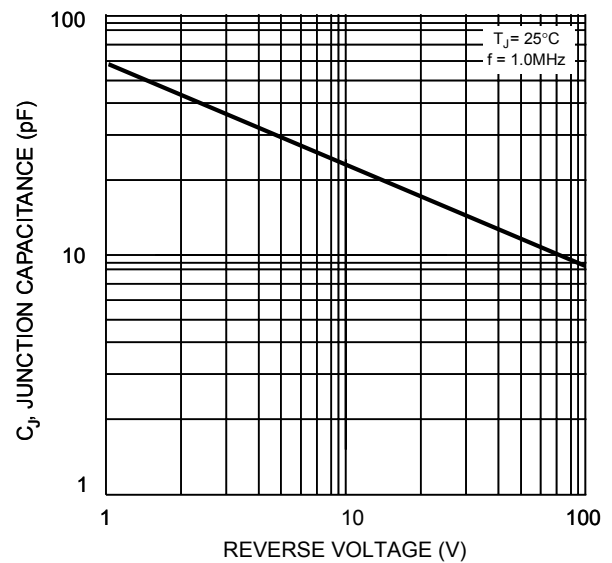


Fig. 5 Typical Reverse Characteristics (per element)

