

**SINGLE PHASE GLASS PASSIVATED BRIDGE RECTIFIER**  
Voltage :50 to 1000V      Current :4.0A

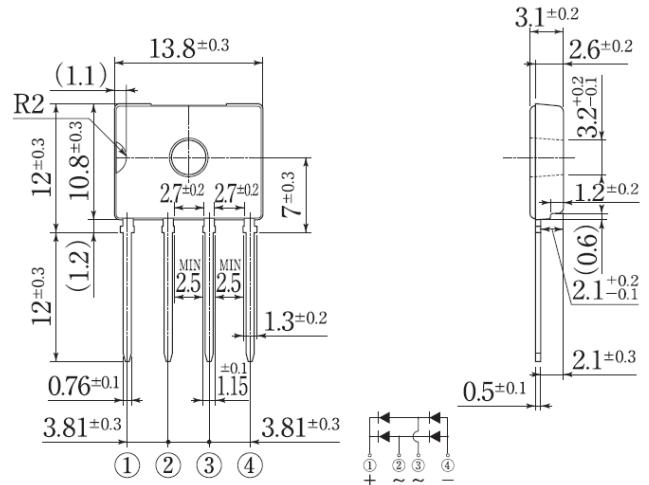
### Features

- Glass passivated chip junction
- High case dielectric strength
- High surge current capability
- Ideal for printed circuit board

### Mechanical Data

- Terminal: Plated leads solderable per MIL-STD 202E, Method 208C
- Case: UL-94 Class V-0 recognized Flame Retardant Epoxy
- Polarity: Polarity symbol marked on body
- Mounting position: any

### D3K



Dimensions in millimeters

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(single-phase, half -wave, 60HZ, resistive or inductive load rating at 25°C, unless otherwise stated, for capacitive load, derate current by 20%)

	Symbol	UG4K B05	UG4 KB10	UG4 KB20	UG4 KB40	UG4K B60	UG4 KB80	UG4K B100	units
Maximum repetitive peak reverse voltage	V <sub>rrm</sub>	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V <sub>rms</sub>	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V <sub>dc</sub>	50	100	200	400	600	800	1000	V
Maximum average forward rectified output current T <sub>c</sub> 138°C with heatsink	I <sub>f(av)</sub>	4.0							A
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method)	I <sub>fsm</sub>	135							A
Maximum instantaneous forward voltage drop per leg at 2.0A	V <sub>f</sub>	1.00							V
Rating for fusing (3ms ≤ t < 8.3ms)	I <sup>2</sup> t	75							A <sup>2</sup> Sec
Maximum DC reverse current at rated DC blocking voltage per leg	I <sub>r</sub>	10.0 500							μA
Thermal resistance	without heatsink	R <sub>th(ja)</sub> 55							°C/W
	with heatsink	R <sub>th(jc)</sub> 1.5							
	without heatsink	R <sub>th(jl)</sub> 15							
Operating junction and storage temperature range	T <sub>j</sub> , T <sub>stg</sub>	-55 to +150							°C

Note:

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**RATINGS AND CHARACTERISTIC CURVES**

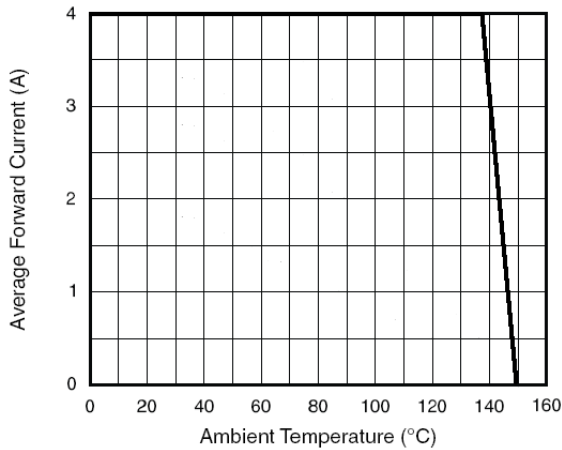


Figure 1. Forward Current Derating Curve

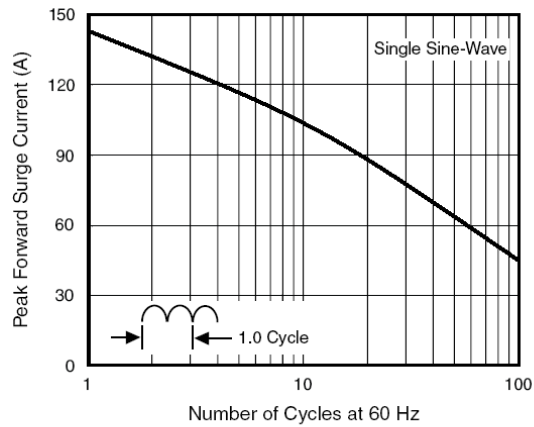


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current Per Diode

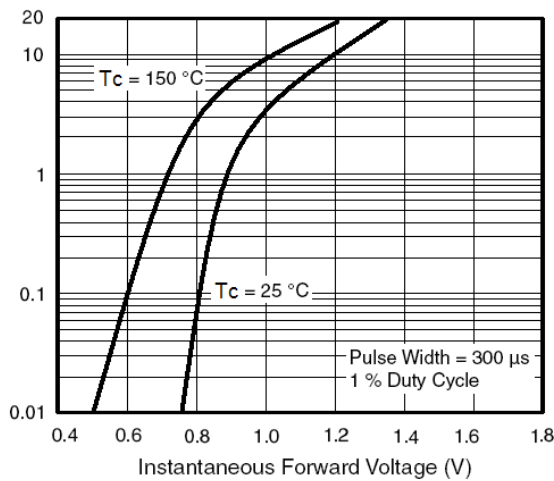


Figure 3. Typical Forward Characteristics Per Diode

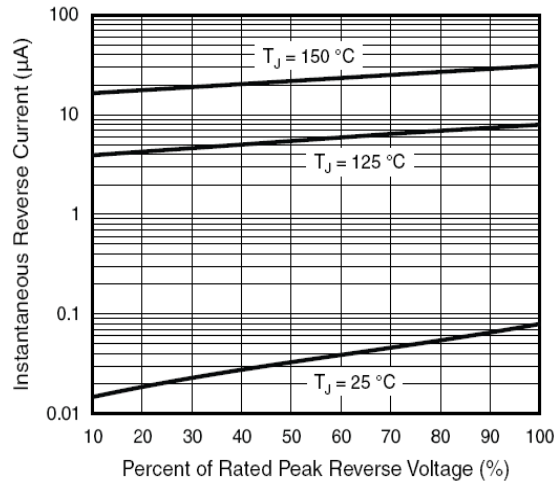


Figure 4. Typical Reverse Leakage Characteristics Per Diode

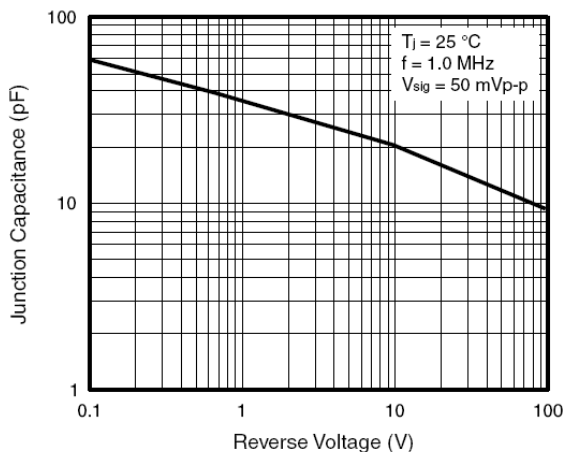


Figure 5. Typical Junction Capacitance Per Diode