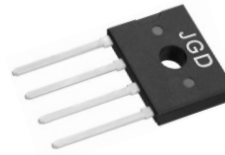


Features

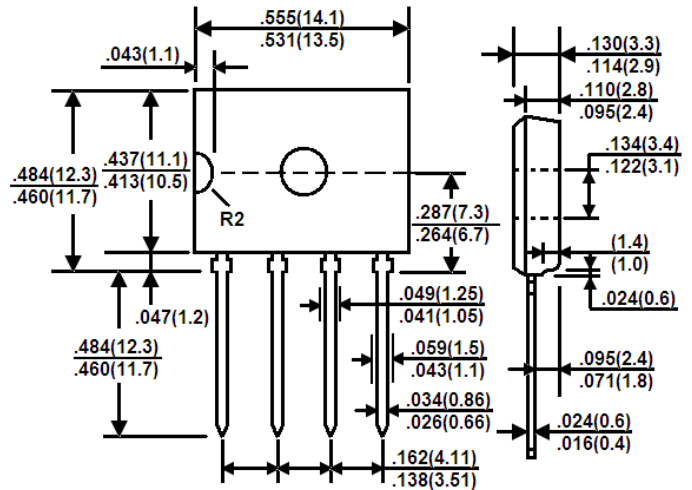
- * Glass passivated chip junction
- * High Surge Current Capability
- * High case dielectric strength
- * Ideal for printed circuit boards



RoHS
COMPLIANT

Package Outline Dimensions in inches (millimeters)

D3K:



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

Maximum Ratings and Electrical Characteristics

Rating at 25 °C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Type Number	Symbol	UG3K B05	UG3K B10	UG3K B20	UG3K B40	UG3K B60	UG3K B80	UG3K B100	Unit	
Maximum repetitive peak reverse voltage	V _{rrm}	50	100	200	400	600	800	1000	V	
Maximum RMS voltage	V _{rms}	35	70	140	280	420	560	700	V	
Maximum DC blocking voltage	V _{dc}	50	100	200	400	600	800	1000	V	
Maximum average forward rectified output current T _c 140°C with heat sink	I _{f(av)}	3.0							A	
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method)	I _{fsm}	90							A	
Maximum instantaneous forward voltage drop per leg at 1.5A	V _f	1.05							V	
Rating for fusing (3ms ≤ t < 8.3ms)	I ² t	35							A ² Sec	
Maximum DC reverse current at Ta = 25°C rated DC blocking voltage per leg Ta = 125°C	I _r	10.0 500							μA	
Thermal resistance	without heat sink	R _{th(ja)}	55							°C/W
	with heat sink	R _{th(jc)}	1.5							
	without heat sink	R _{th(jl)}	15							
Operating junction and storage temperature range	T _j , T _{stg}	-55 to +150							°C	

Ratings and Characteristic Curves

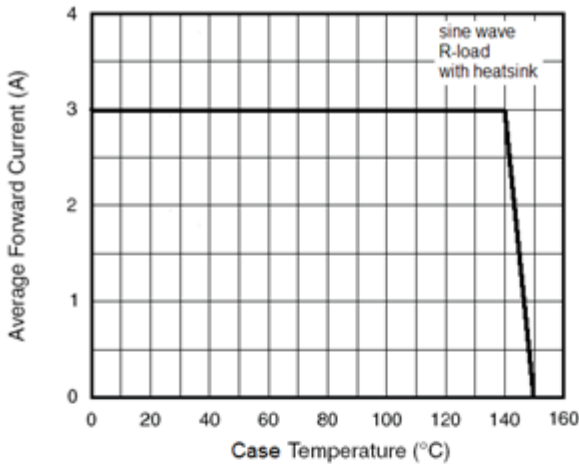


Figure 1. Forward Current Derating Curve

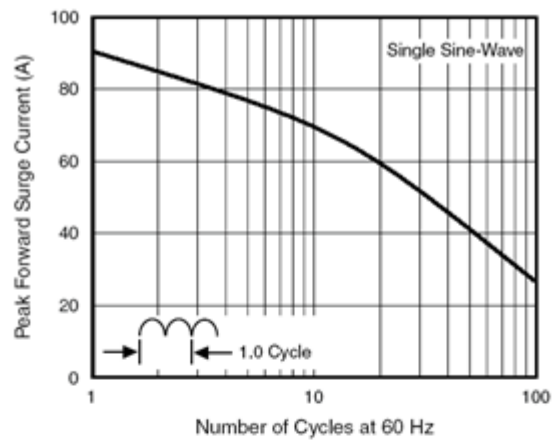


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current Per Diode

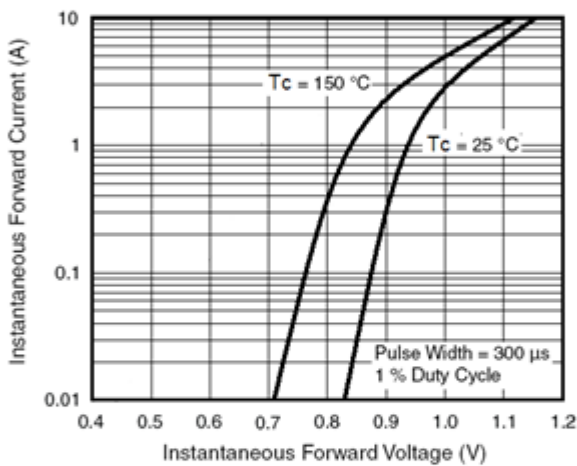


Figure 3. Typical Forward Characteristics Per Diode

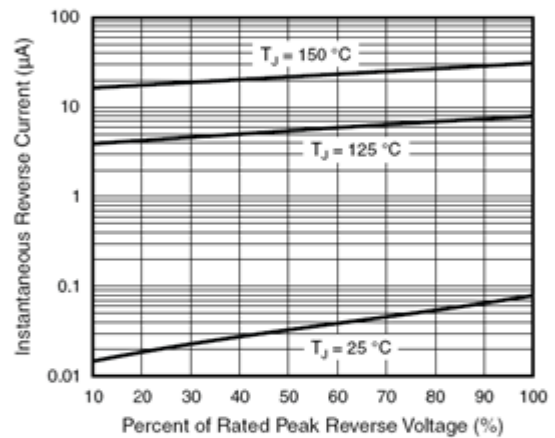


Figure 4. Typical Reverse Leakage Characteristics Per Diode

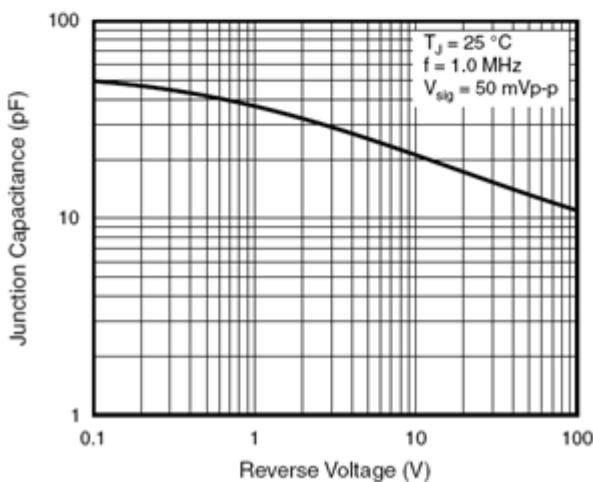


Figure 5. Typical Junction Capacitance Per Diode



UG3KB05 THRU UG3KB100

Glass Passivated Single Phase Bridge Rectifiers

Ordering Information

Part No.	Package	Packing
UG3KB05~UG3KB100	D3K	30pcs/Tube
UG3KB05~UG3KB100	D3K	0.5K/Bulk packing