

UG4KB05 THRU UG4KB100

SINGLE PHASE GLASS PASSIVATED BRIDGE RECTIFIER

Voltage: 50 to 1000V

Current: 4.0A

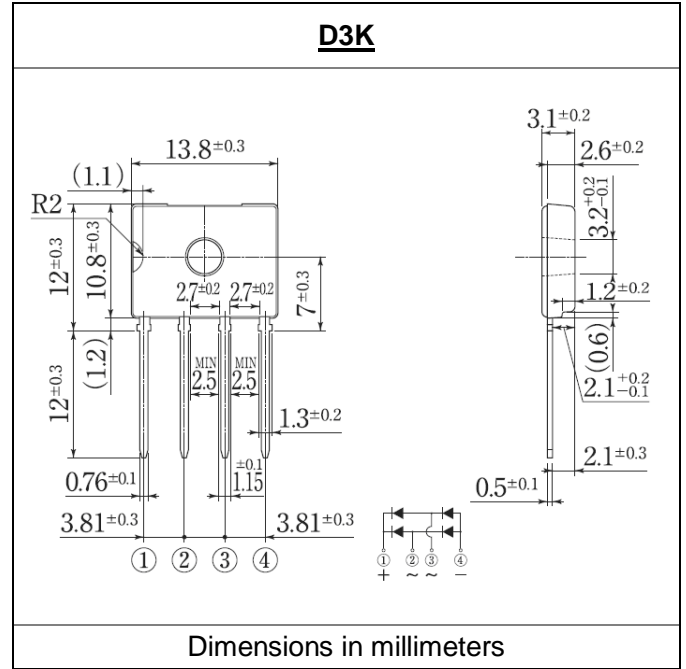


Features

Glass passivated chip junction
High case dielectric strength
High surge current capability
Ideal for printed circuit board
This series is UL listed under Recognized Component Index, file number E330278

Mechanical Data

Terminal: Plated leads solderable per J-STD-002
Case: UL-94 Class V-0 recognized Flame Retardant Epoxy
Polarity: Polarity symbol marked on body
Mounting position: any



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(single-phase, half -wave, 60HZ, resistive or inductive load rating at 25°C, unless otherwise stated)

	Symbol	UG4K B05	UG4 KB10	UG4 KB20	UG4 KB40	UG4K B60	UG4 KB80	UG4K B100	units
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 100°C with heatsink	I _{f(av)}	4.0							A
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method)	I _{fsm}	135							A
Maximum instantaneous forward voltage drop per leg at 2.0A	V _f	1.00							V
Rating for fusing (3ms ≤ t < 8.3ms)	I ² t	75							A ² Sec
Maximum DC reverse current at rated DC blocking voltage per leg	I _r	10.0 500							μA
Thermal resistance	R _{th(ja)} R _{th(jc)} R _{th(jl)}	55 1.5 15							°C/W
Operating junction and storage temperature range	T _j , T _{stg}	-55 to +150							°C

Note:

RATINGS AND CHARACTERISTIC CURVES UG4KB05 THRU UG4KB100

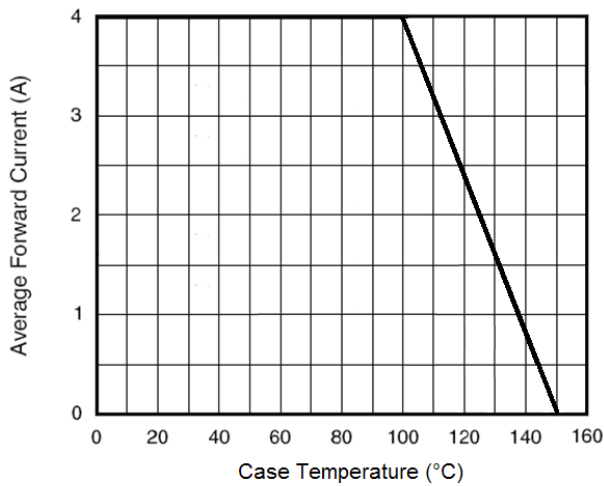


Figure 1. Forward Current Derating Curve

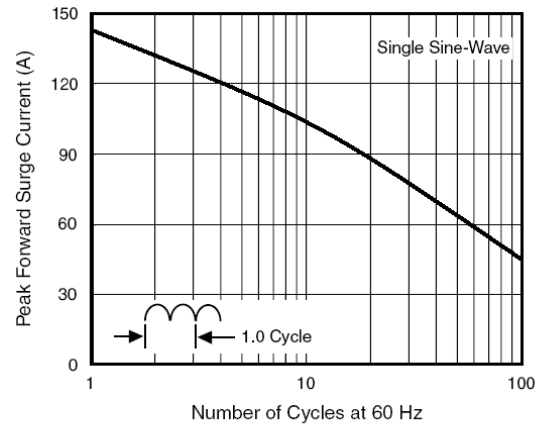


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current Per Diode

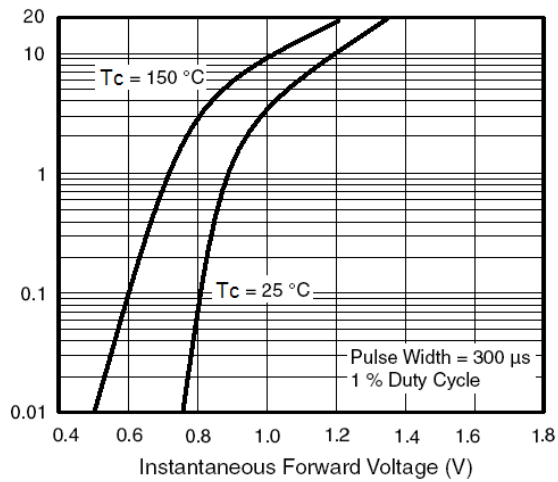


Figure 3. Typical Forward Characteristics Per Diode

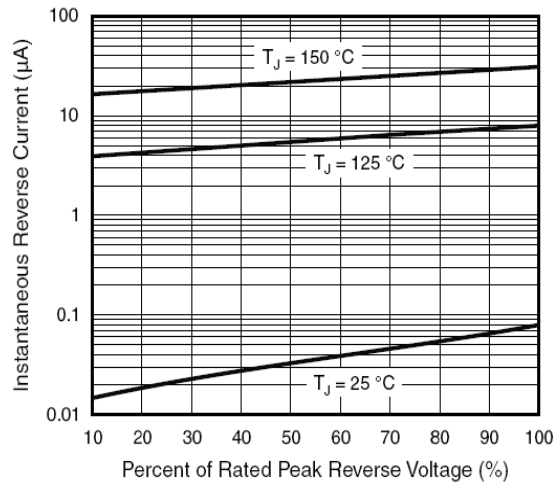


Figure 4. Typical Reverse Leakage Characteristics Per Diode

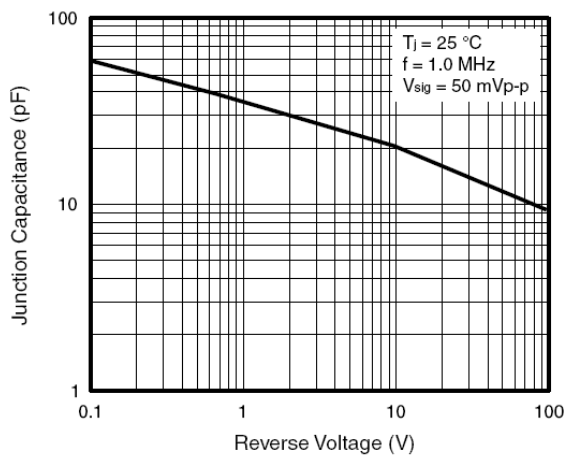


Figure 5. Typical Junction Capacitance Per Diode