

UG4KB05-E THRU UG4KB100-E

SINGLE PHASE GLASS PASSIVATED BRIDGE RECTIFIER

Voltage: 50 to 1000V

Current: 4.0A



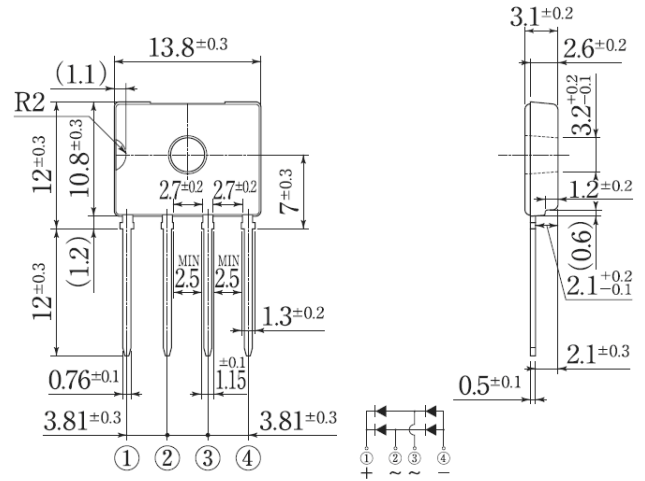
Features

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
 Halogen Free

Mechanical Data

Terminal: Plated leads solderable per J-STD-002
 Case: Halogen Free 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)

	Symbol	UG4K B05 -E	UG4 KB10 -E	UG4 KB20 -E	UG4 KB40 -E	UG4K B60 -E	UG4 KB80 -E	UG4K B100 -E	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 138°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-E THRU UG4KB100-E

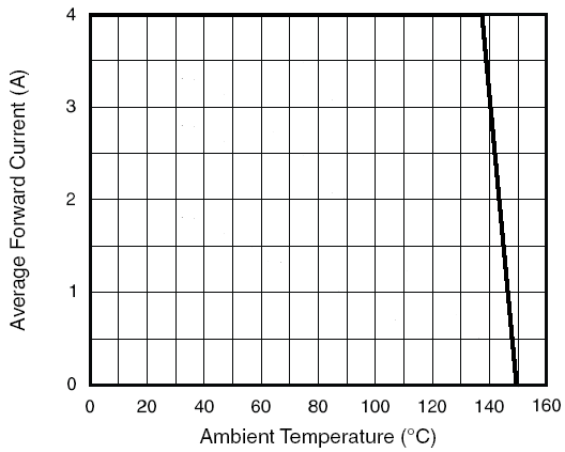


Figure 1. Forward Current Derating Curve

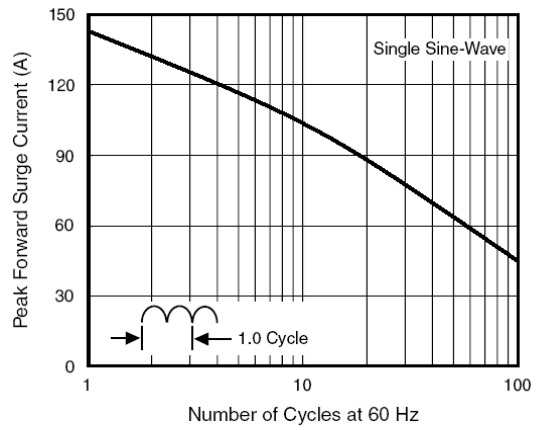


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current Per Diode

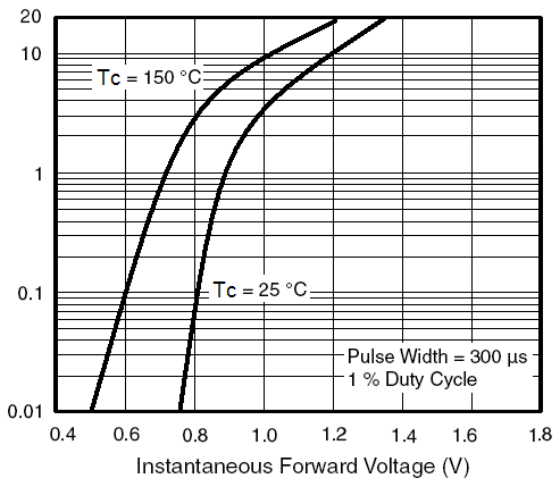


Figure 3. Typical Forward Characteristics Per Diode

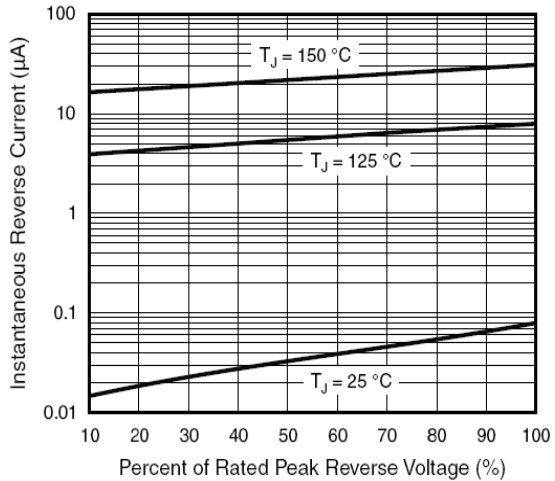


Figure 4. Typical Reverse Leakage Characteristics Per Diode

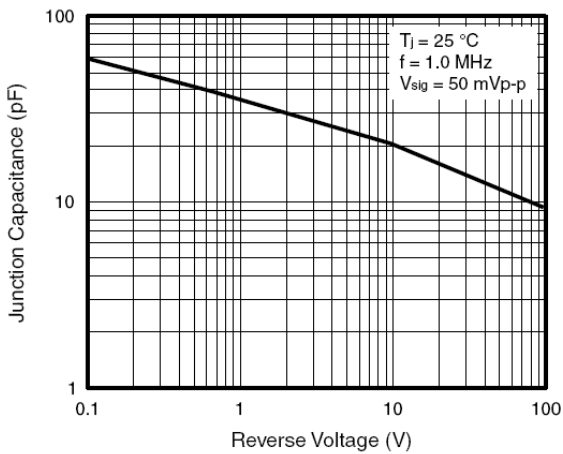


Figure 5. Typical Junction Capacitance Per Diode