



WILLAS



UG6KB05
THRU
UG6KB100

SINGLE PHASE GLASS PASSIVATED BRIDGE RECTIFIER

Voltage :50 to 1000V

Current :6.0A

Features

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

Mechanical Data

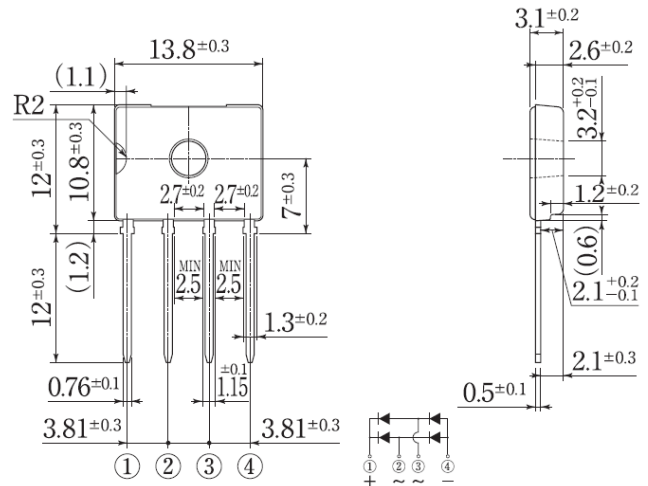
Terminal: Plated leads solderable per MIL-STD 202E, Method 208C

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	UG6K B05	UG6 KB10	UG6 KB20	UG6 KB40	UG6K B60	UG6 KB80	UG6K 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 138°C with heatsink	I _{f(av)}	6.0							A
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method)	I _{fsm}	150							A
Maximum instantaneous forward voltage drop per leg at 3.0A	V _f	1.00							V
Rating for fusing (3ms ≤ t < 8.3ms)	I ² t	93							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:



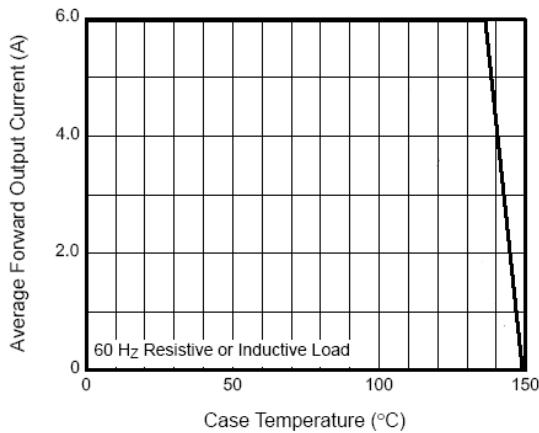
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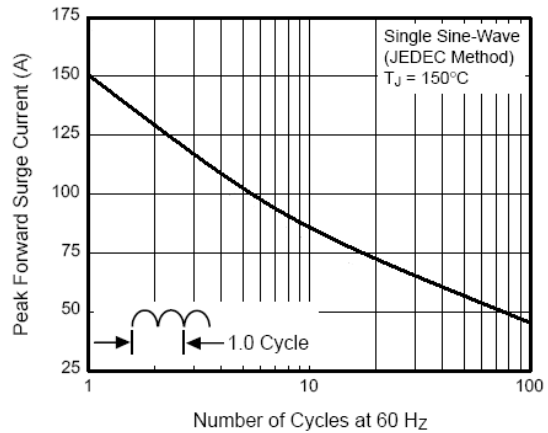
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RATINGS AND CHARACTERISTIC CURVES



**Fig. 1 – Derating Curve
Output Rectified Current**



**Fig. 2 – Maximum Non-Repetitive Peak
Forward Surge Current Per Leg**

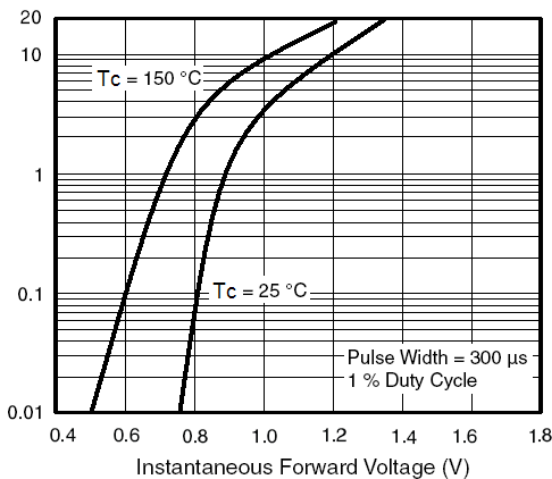


Figure 3. Typical Forward Characteristics Per Diode

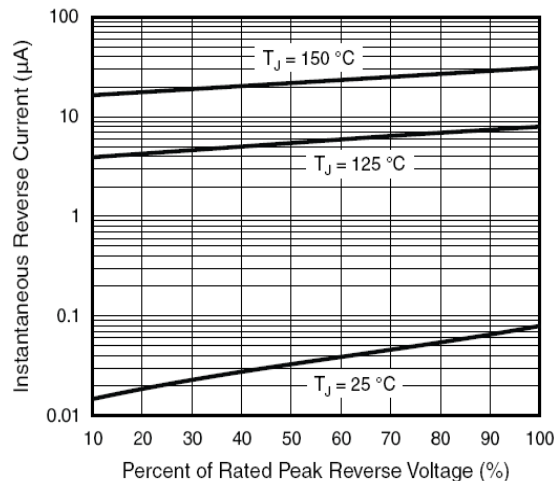


Figure 4. Typical Reverse Leakage Characteristics Per Diode

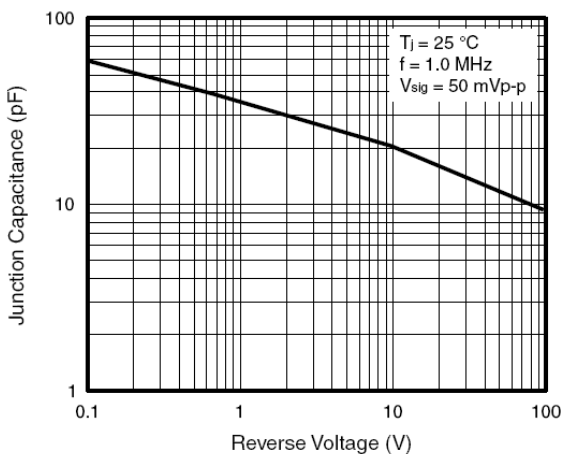


Figure 5. Typical Junction Capacitance Per Diode