WILLAS

RoHS COMPLIANT

UG4KB05 THRU UG4KB100

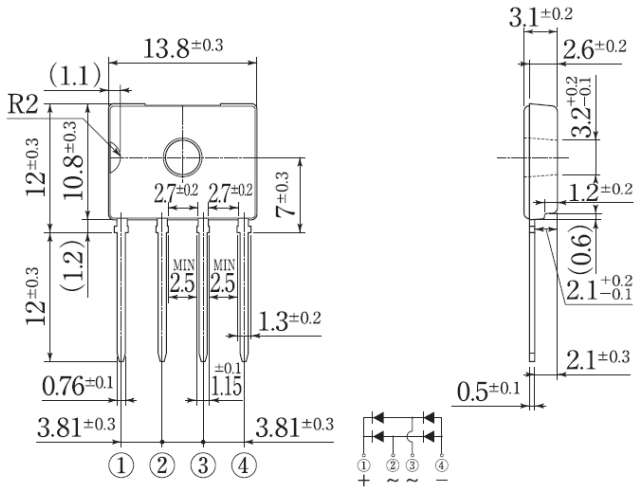
SINGLE PHASE GLASS PASSIVATED BRIDGE RECTIFIER

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

D3K



Dimensions in millimeters

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

(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	Vrrm	50	100	200	400	600	800	1000	V
Maximum RMS voltage	Vrms	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	Vdc	50	100	200	400	600	800	1000	V
Maximum average forward rectified output current Tc 138℃ with heatsink	If(av)	4.0							A
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method)	Ifsm	135							A
Maximum instantaneous forward voltage drop per leg at 2.0A	Vf	1.00							V
Rating for fusing (3ms≤ t < 8.3ms)	I^2t	75							A^2Sec
Maximum DC reverse current at rated DC blocking voltage per leg Ta = 25°C Ta = 125°C	Ir	10.0 500							μA
Thermal resistance without heatsink with heatsink without heatsink	Rth(ja) Rth(jc) Rth(jl)	55 1.5 15							℃/W
Operating junction and storage temperature range	Tj, Tstg	-55 to +150							℃

Note:

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RATINGS AND CHARACTERISTIC CURVES

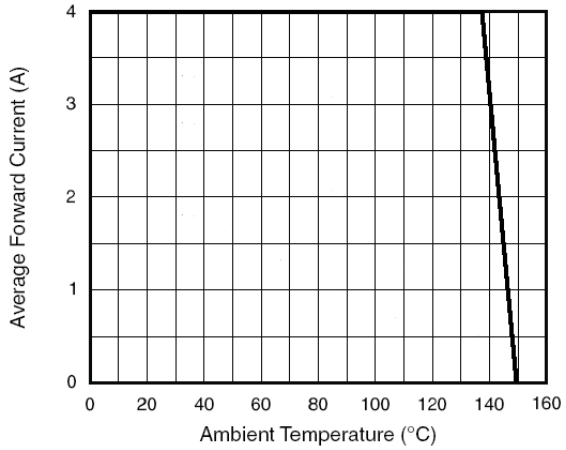

Figure 1. Forward Current Derating Curve

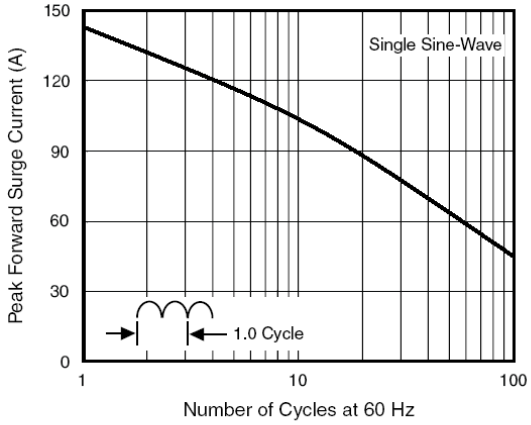

Figure 2. Maximum Non-Repetitive Peak Forward Surge Current Per Diode

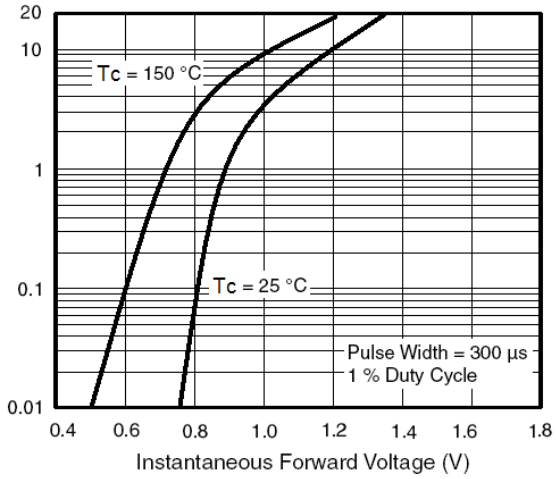

Figure 3. Typical Forward Characteristics Per Diode

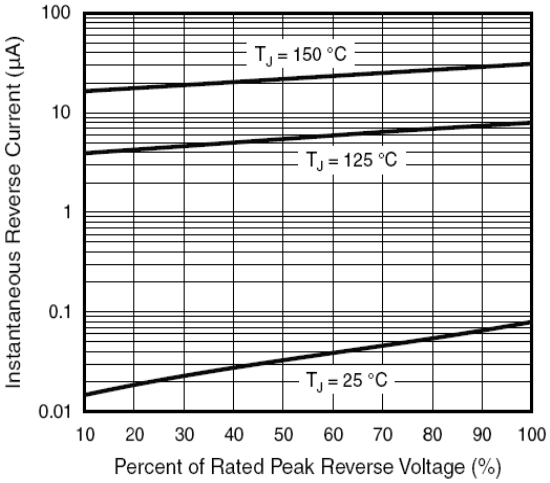

Figure 4. Typical Reverse Leakage Characteristics Per Diode

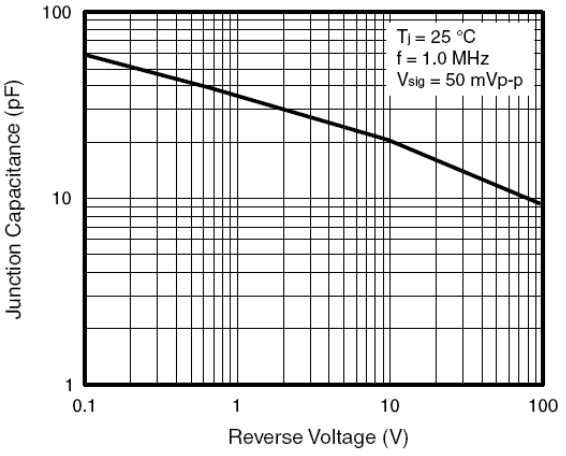

Figure 5. Typical Junction Capacitance Per Diode