

UG3KB05 THRU UG3KB100

SINGLE PHASE GLASS PASSIVATED BRIDGE RECTIFIER

Voltage: 50 to 1000V

Current: 3.0A

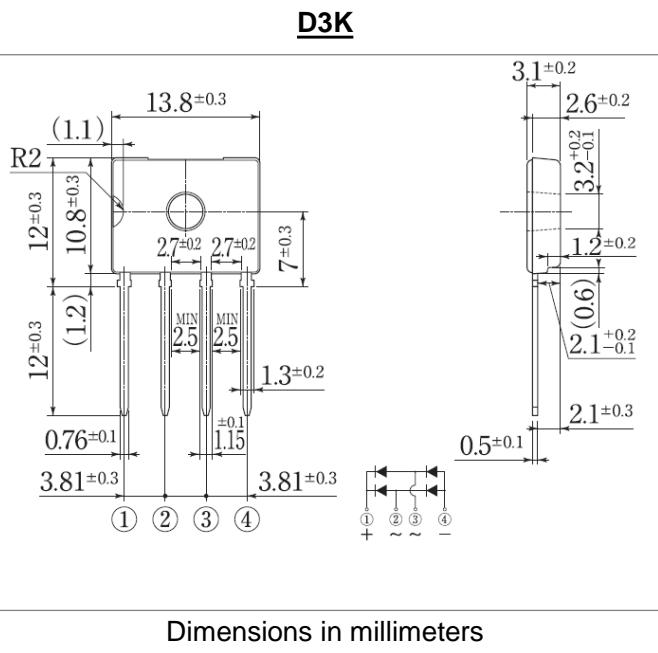


Features

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



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	UG3K B05	UG3 KB10	UG3 KB20	UG3 KB40	UG3K B60	UG3 KB80	UG3K 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 140°C with heatsink	If(av)					3.0			A
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method)	Ifsm					90			A
Maximum instantaneous forward voltage drop per leg at 1.5A	Vf				1.05				V
Rating for fusing (3ms ≤ t < 8.3ms)	I ² t				35				A ² Sec
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				°C/W
Operating junction and storage temperature range	Tj, Tstg				-55 to +150				°C

Note:

RATINGS AND CHARACTERISTIC CURVES UG3KB05 THRU UG3KB100

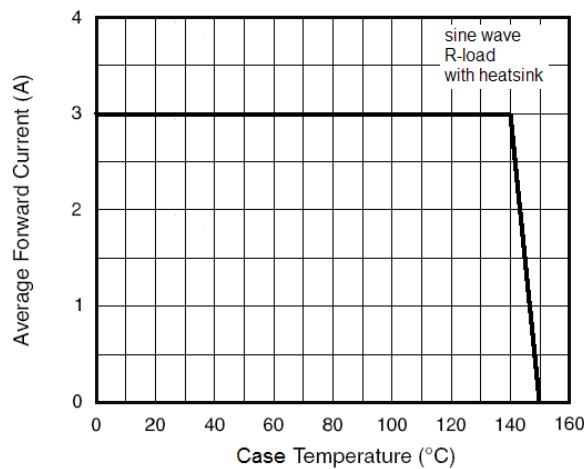


Figure 1. Forward Current Derating Curve

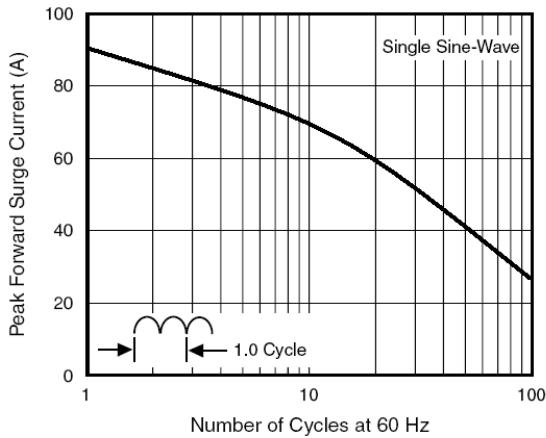


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current Per Diode

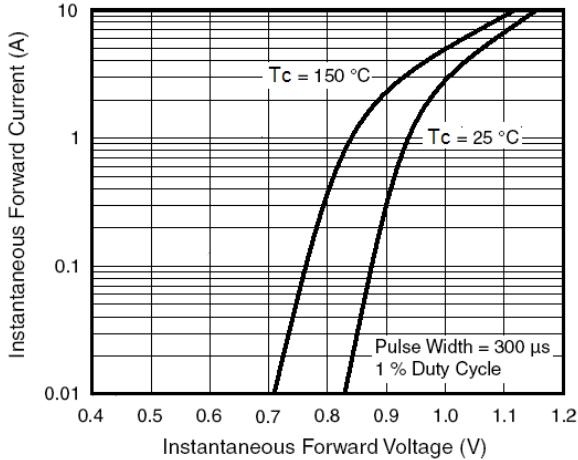


Figure 3. Typical Forward Characteristics Per Diode

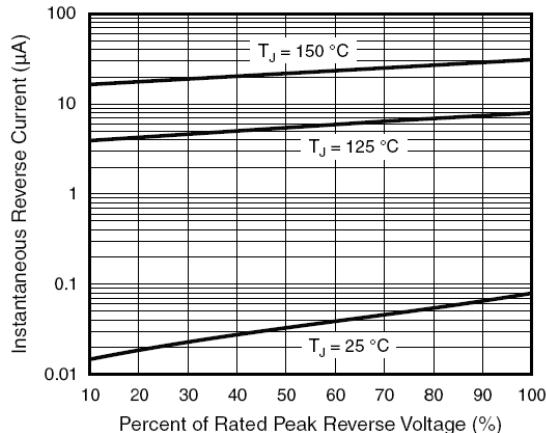


Figure 4. Typical Reverse Leakage Characteristics Per Diode

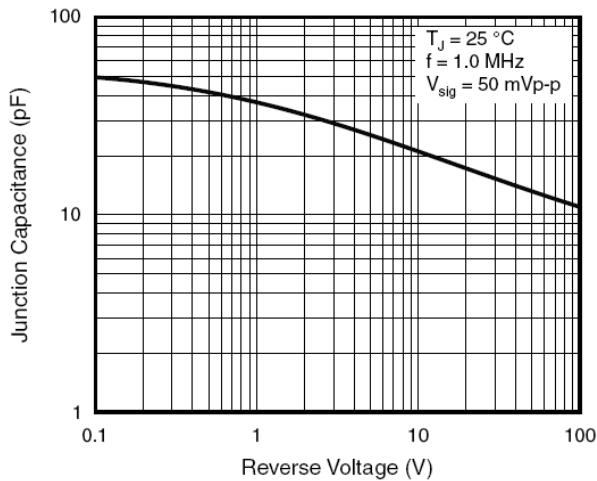


Figure 5. Typical Junction Capacitance Per Diode