

### Single Phase 4.0Amp Glass passivated Bridge Rectifiers

#### Features

- ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ◆ Idea for printed circuit board
- ◆ Glass passivated Junction chip
- ◆ Low reverse leakage
- ◆ High forward surge current capability
- ◆ High temperature soldering guaranteed  
250°C/10 seconds at terminals

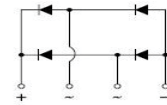
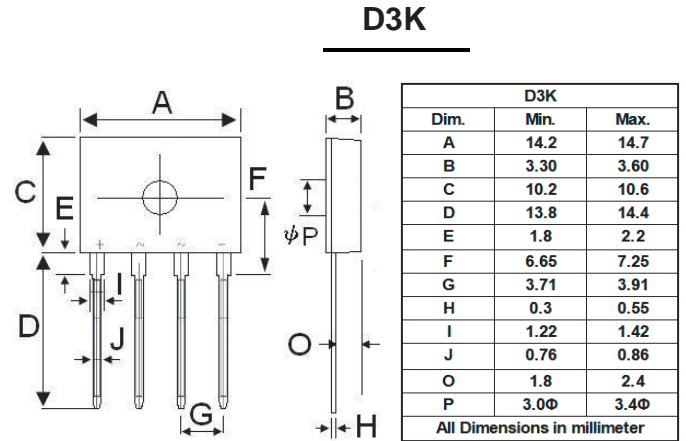
#### Mechanical Data

**Case :** Molded plastic body

**Terminals :** Solder plated, solderable per MIL-STD-750,Method 2026

**Polarity :** Polarity symbol marking on body

**Mounting Position :** Any



#### Maximum Ratings And Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified. Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

Parameter	SYMBOLS	UG4K B05G	UG4K B10G	UG4K B20G	UG4K B40G	UG4K B60G	UG4K B80G	UG4K B100G	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 current with heatsink	$I_{(AV)}$	4.0							A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	$I_{FSM}$	150.0							A
Rating for fusing ( $t=8.3ms, T_a=25^\circ C$ )	$I_t^2$	93.38							$A^2s$
Maximum instantaneous forward voltage at 4.0A	$V_F$	1.10							V
Maximum DC reverse current $T_A = 25^\circ C$ at rated DC blocking voltage $T_A = 125^\circ C$	$I_R$	5.0 500							$\mu A$
Typical junction capacitance (Note 1)	$C_J$	56.0							pF
Typical thermal resistance	$R_{qJA}$	55.0							$^\circ C/W$
Operating junction and storage temperature range	$T_J, T_{STG}$	-55 to +150							$^\circ C$

**Note:** 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

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### Ratings And Characteristic Curves

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

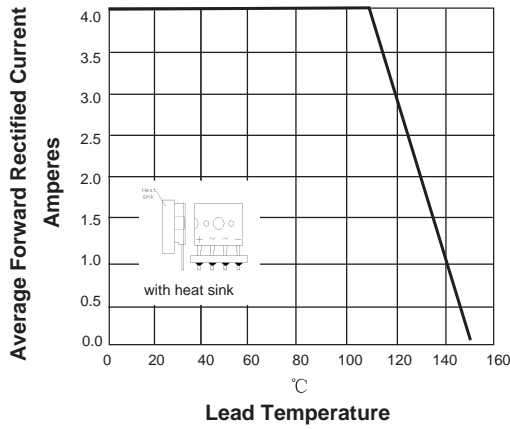


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

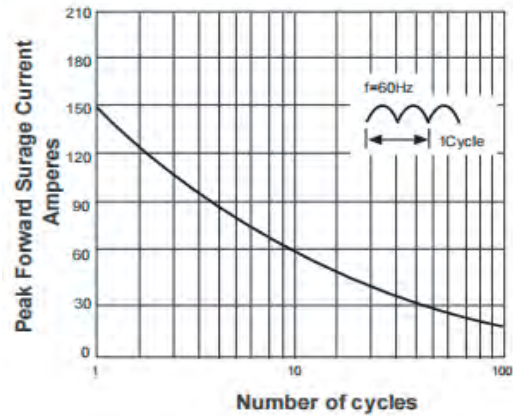


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

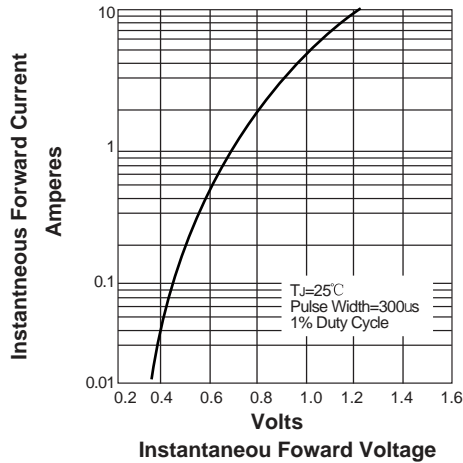
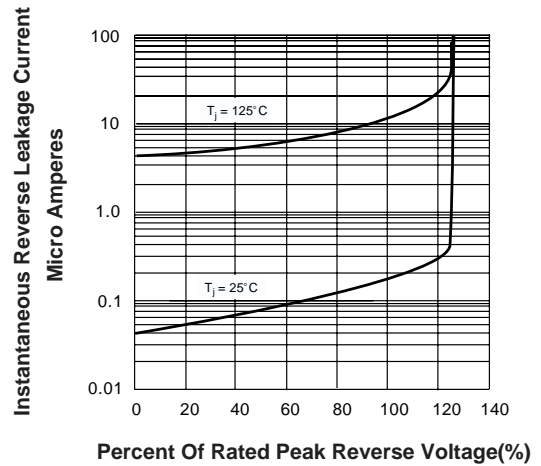


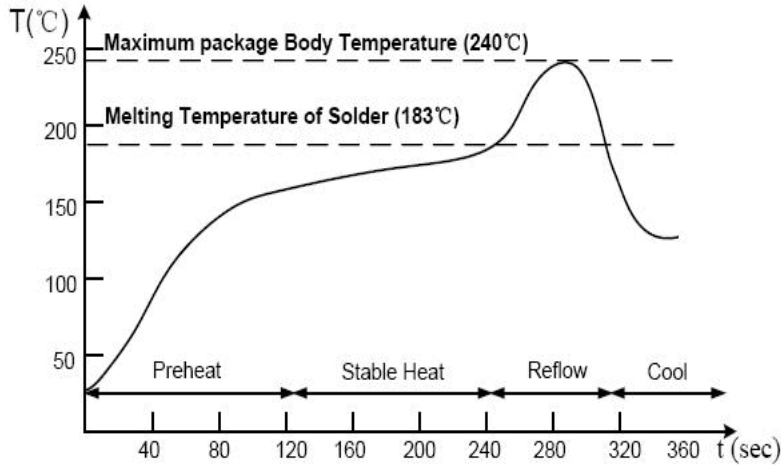
FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS





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### Suggested Soldering Temperature Profile



#### Note

- Recommended reflow methods: IR, vapor phase oven, hot air oven, wave solder.
- The device can be exposed to a maximum temperature of 265°C for 10 seconds.
- Devices can be cleaned using standard industry methods and solvents.
- If reflow temperatures exceed the recommended profile, devices may not meet the performance requirements.

### Package Information

#### Tube Package

Package	Tube (mm)	Q'TY/Tube (Kpcs)	Box Size (mm)	QTY/Box (Kpcs)	Carton Size (mm)	Q'TY/Carton (Kpcs)
D3K	445*30.7*5.6	0.03	495*130*70	1.2	520*370*155	6