

## D3KB05~D3KB100

### Single Phase 3.0Amp 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

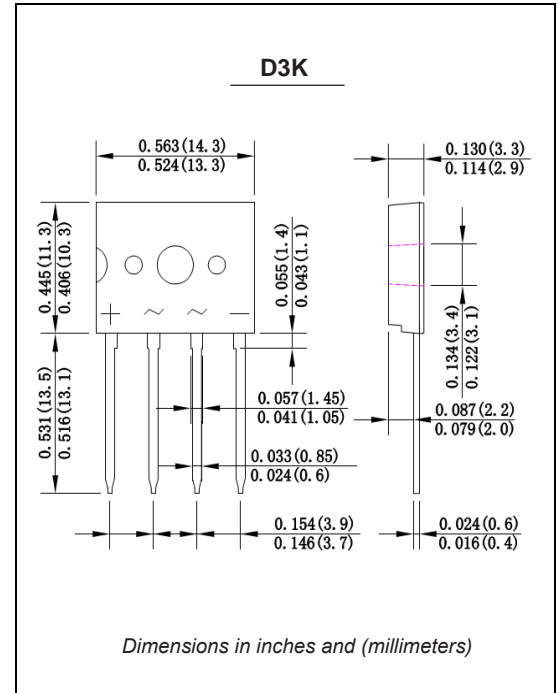
#### Mechanical Data

**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%.

	SYMBOLS	D3KB 05	D3KB 10	D3KB 20	D3KB 40	D3KB 60	D3KB 80	D3KB 100	UNITS
Maximum repetitive peak reverse voltage	$V_{RRM}$	50	100	200	400	600	800	1000	VOLTS
Maximum RMS voltage	$V_{RMS}$	35	70	140	280	420	560	700	VOLTS
Maximum DC blocking voltage	$V_{DC}$	50	100	200	400	600	800	1000	VOLTS
Maximum average forward rectified current at $T_L=100\text{ }^\circ\text{C}$ with heat sink at $T_a=25\text{ }^\circ\text{C}$ without heat sink	$I_{(AV)}$					3.0			Amp
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$					90.0			Amps
Maximum instantaneous forward voltage at 1.5A	$V_F$					1.1			Volts
Maximum DC reverse current at rated DC blocking voltage $T_A=25\text{ }^\circ\text{C}$ $T_A=125\text{ }^\circ\text{C}$	$I_R$					5.0 500			$\mu\text{A}$
Typical thermal resistance (Note 1)	$R_{qJA}$					55			$^\circ\text{C/W}$
Operating junction and storage temperature range	$T_J, T_{STG}$					-50 to +150			$^\circ\text{C}$

**Note:** 1. Mounted on PCB with 12\*12mm copper pad

# Ratings And Characteristic Curves

## D3KB05 THRU D3KB100

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

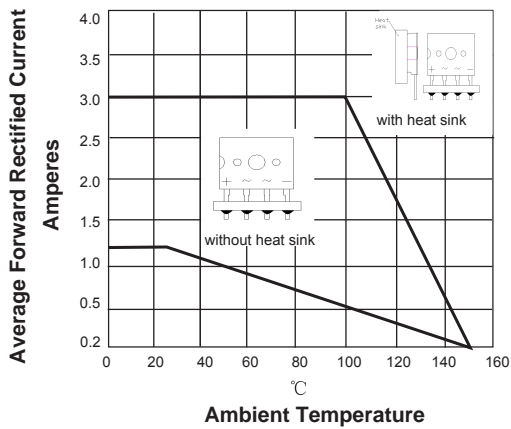


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

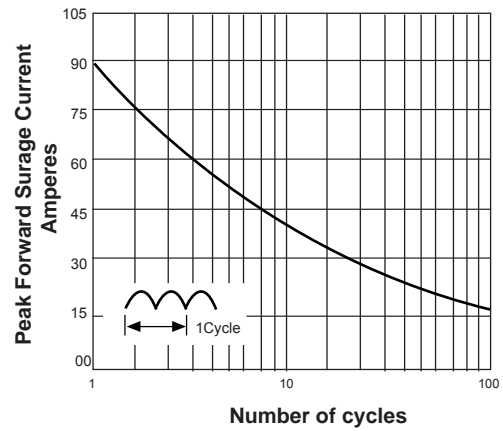


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

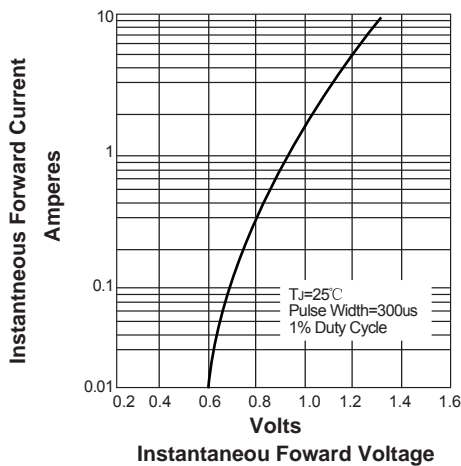


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS

