

3.0A GLASS PASSIVATED BRIDGE RECTIFIER

Reverse Voltage - 100 to 1000 V

Forward Current – 3.0A

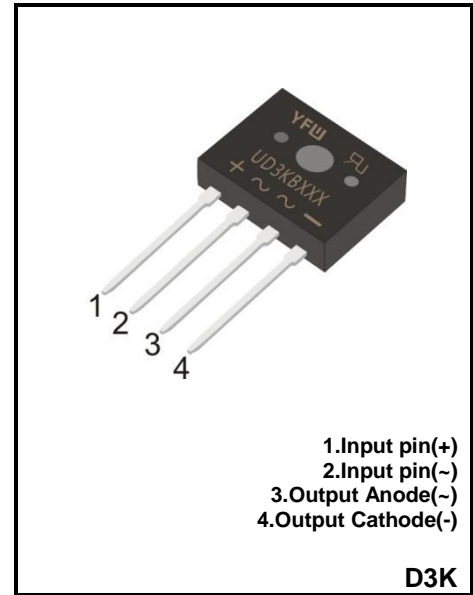
FEATURES

- ◆High current capability
- ◆Low forward voltage drop
- ◆Glass Passivated Chip Junction
- ◆Low power loss, high efficiency
- ◆Lead free in comply with EU RoHS 2011/65/EU directives



MECHANICAL DATA

- ◆Case: D3K
- ◆Terminals: Solderable per MIL-STD-202E, Method 208C
- ◆Case:UL-94 Class V-0 recognized Flame Retardant Epoxy



Maximum Ratings and Electrical characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

Parameter	Symbols	UD3KB10	UD3KB20	UD3KB40	UD3KB60	UD3KB80	UD3KB100	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	100	200	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	100	200	400	600	800	1000	V
Average Rectified Output Current	$I_{(AV)}$	3						A
Peak Forward Surge Current 8.3 ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	90						A
Forward Voltage per element @ $I_F=1.5A$ DC	V_F	1.1						V
Maximum DC Reverse Current @ $T_a=25^{\circ}C$ at Rated DC Blocking Voltage @ $T_a=125^{\circ}C$	I_R	10 500						μA
I2t Rating for Fusing(3ms \leq t \leq 8.3ms)	I^2t	35						A ² S
Maximum Typical Thermal Resistance wwithout heatsink wwith heatsink wwithout heatsink	$R_{\theta JA}$ $R_{\theta JC}$ $R_{\theta JL}$	55 1.5 15						$^{\circ}C/W$
Operating and Storage Temperature Range	T_j, T_{stg}	-55 ~ +150						$^{\circ}C$

(1) Measured at 1 MHz and applied reverse voltage of 4 V D.C

(2) Device mounted on 50mm*50mm*1.6mm Cu plate heatsink.

FIG.1-DERATING CURVE OUTPUT RECTIFIED CURRENT

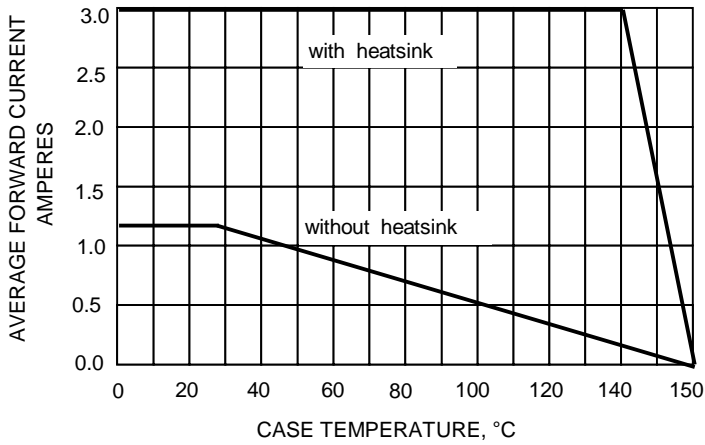


FIG.2-MAXIMUM NON-REPETITIVE SURGE CURRENT

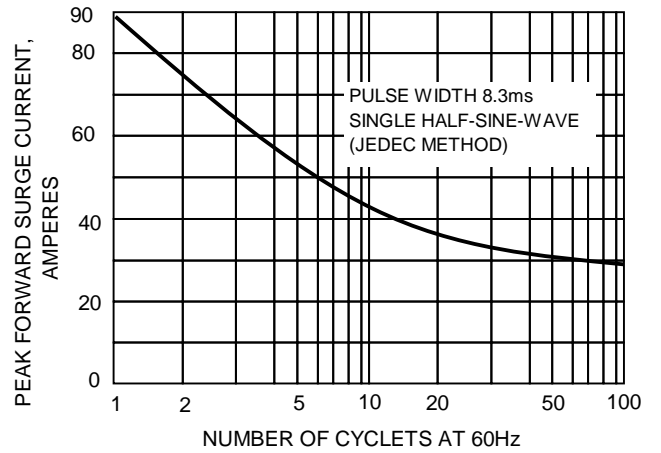


FIG.3-TYPICAL FORWARD CHARACTERISTICS

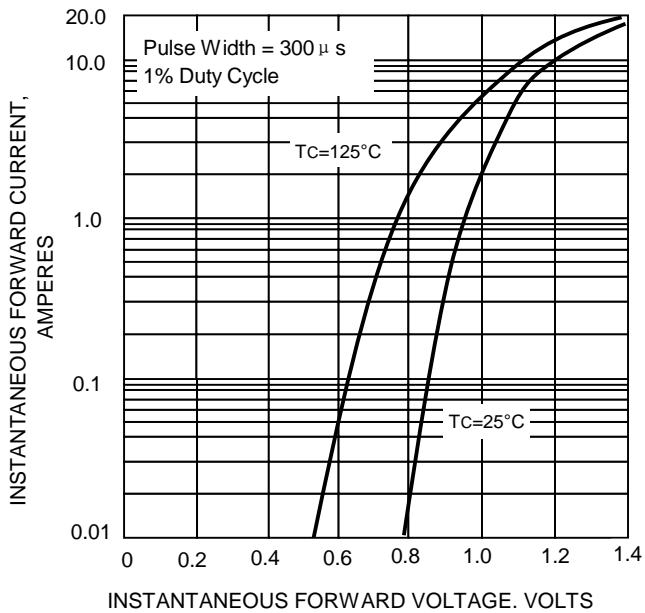
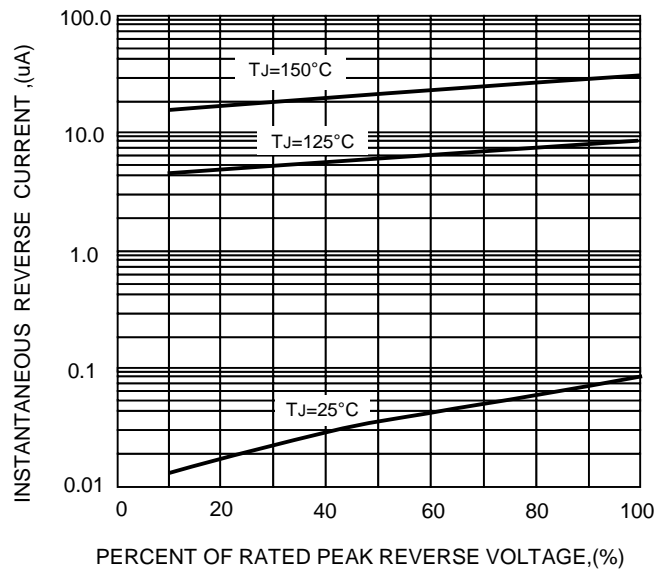
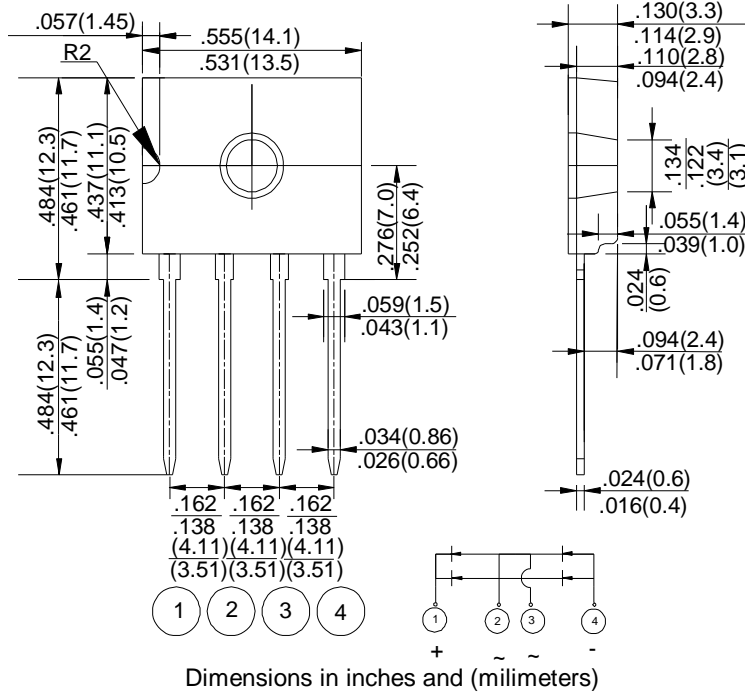


FIG.5-TYPICAL REVERSE CHARACTERISTICS



Package Outline

D3K



Summary of Packing Options

Package	Packing Description	Packing Quantity	Industry Standard
D3K	BOX	500	EIA-481-1