



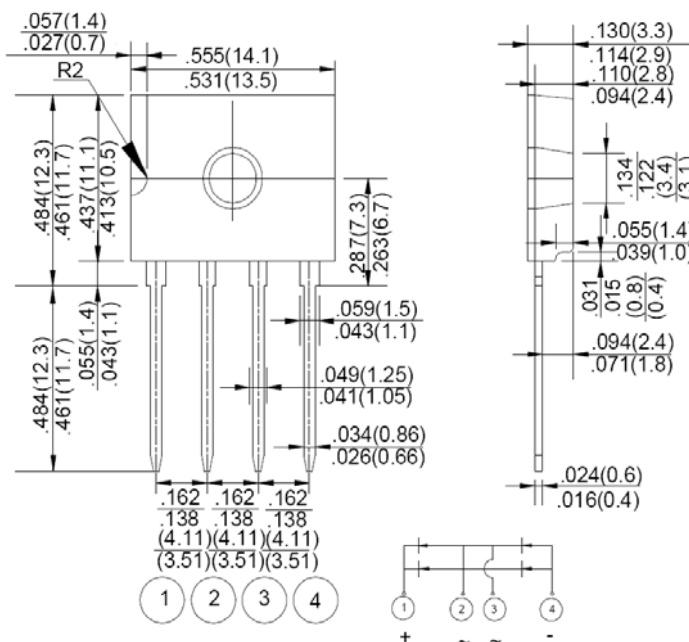
RoHS
COMPLIANCE



D3K

Features

- ✧ UL Recognized File # E-326243
- ✧ Glass passivated junction
- ✧ Ideal for printed circuit board
- ✧ High case dielectric strength
- ✧ Plastic material has Underwriters laboratory flammability Classification 94V-0
- ✧ Typical IR less than 0.1uA
- ✧ High surge current capability
- ✧ High temperature soldering guaranteed:
260°C/10 seconds at 5 lbs.,(2.3kg) tension
- ✧ Green compound with suffix "G" on packing code & prefix "G" on datecode.

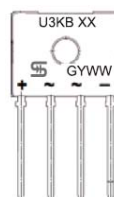


Mechanical Data

- ✧ Case: Molded plastic body
- ✧ Terminals: Pure tin plated, lead free, solderable per MIL-STD-202, Method 208
- ✧ Weight: 1.41 grams
- ✧ Mounting Torque : 0.8 N.M max.

Dimensions in inches and (millimeters)

Marking Diagram



- U3KBXX = Specific Device Code
- G = Green Compound
- Y = Year
- WW = Work Week

Maximum Ratings and Electrical Characteristics

Rating at 25 °C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20%

Type Number	Symbol	UR3KB 60	UR3KB 80	UR3KB 100	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	600	800	1000	V
Maximum Average Forward Current Without heat sink $T_A=29^{\circ}C$ 60Hz sine wave resistance load With heat sink $T_C=140^{\circ}C$	$I_{F(AV)}$		1.2 3.0		A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}		90		A
Rating of fusing ($t < 8.3ms$)	I^2t		35		A ² S
Maximum Instantaneous Forward Voltage (Note 1) @ 1.5A	V_F		1.0		V
Maximum DC Reverse Current at Rated DC Block Voltage	I_R		10		uA
Dielectric Strength (Terminal to Case, AC 1minute)	V_{dis}		2.0		KV
Typical Thermal Resistance	$R_{\theta JA}$ $R_{\theta JC}$ $R_{\theta JL}$		13.7 5.2 5.5		°C/W
Operating Temperature Range	T_J		- 55 to + 150		°C
Storage Temperature Range	T_{STG}		- 55 to + 150		°C

Note 1 : Pulse Test with PW=300 usec, 1% Duty Cycle

RATINGS AND CHARACTERISTIC CURVES (UR3KB60 THRU UR3KB100)

FIG.1 MAXIMUM DERATING CURVE FOR OUTPUT CURRENT

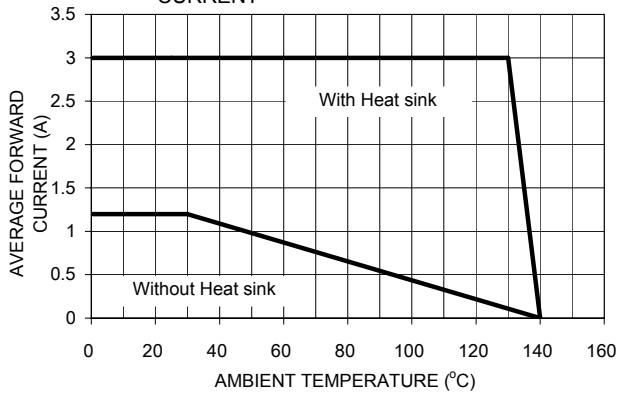


FIG.2 MAXIMUM FORWARD SURGE CURRENT PER LEG

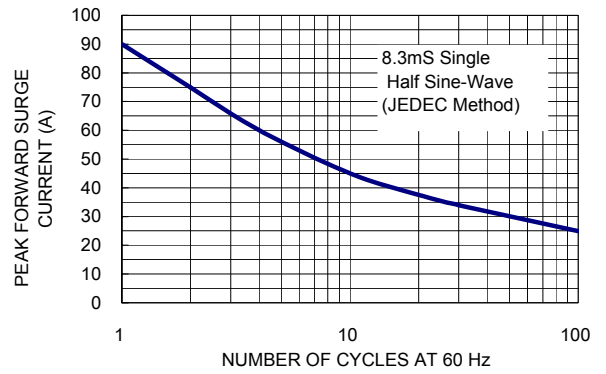


FIG. 3 TYPICAL REVERSE CHARACTERISTICS PER LEG

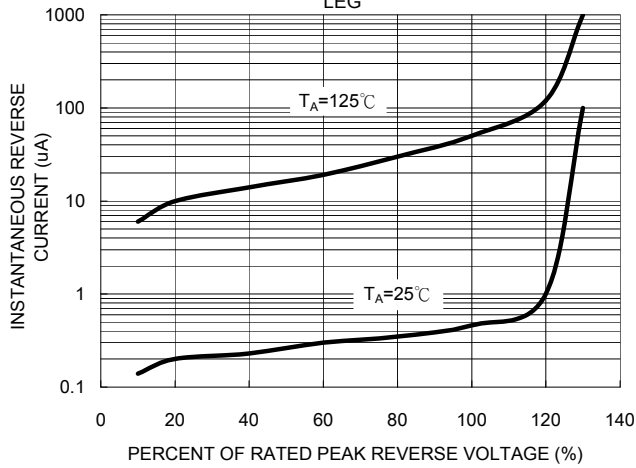


FIG. 4 TYPICAL FORWARD CHARACTERISTICS PER LEG.

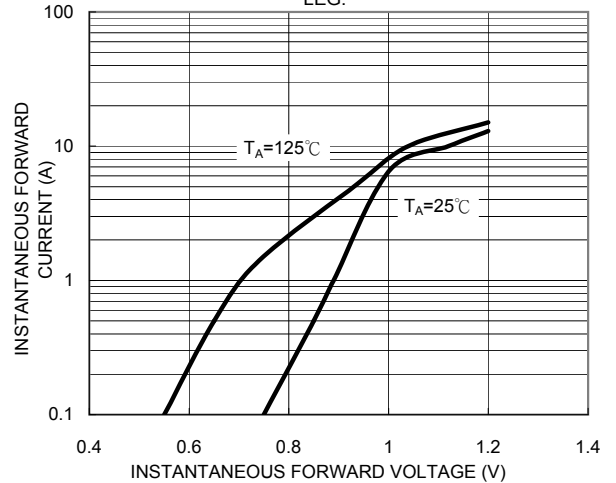


FIG. 5 FORWARD POWER DISSIPATION

