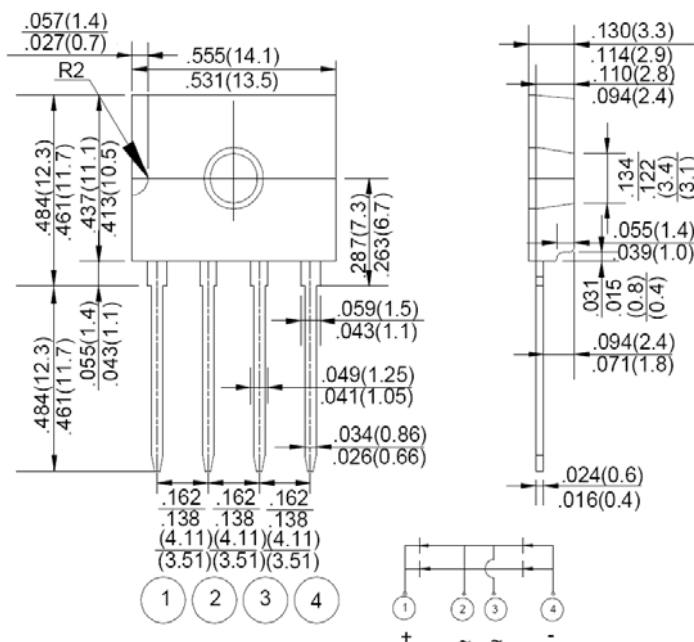




UR3KB60 - UR3KB100

Single Phase 3.0AMPS. Glass Passivated Bridge Rectifiers

D3K



Features

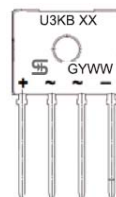
- ✧ UL Recognized File # E-326243
- ✧ Glass passivated junction
- ✧ Ideal for printed circuit board
- ✧ High case dielectric strength
- ✧ Plastic material has Underwriters laboratory flammability Classification 94V-0
- ✧ Typical IR less than 0.1uA
- ✧ High surge current capability
- ✧ High temperature 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

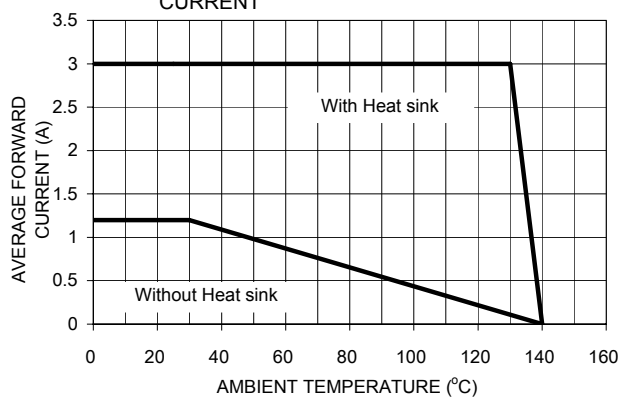


FIG.2 MAXIMUM FORWARD SURGE CURRENT PER LEG

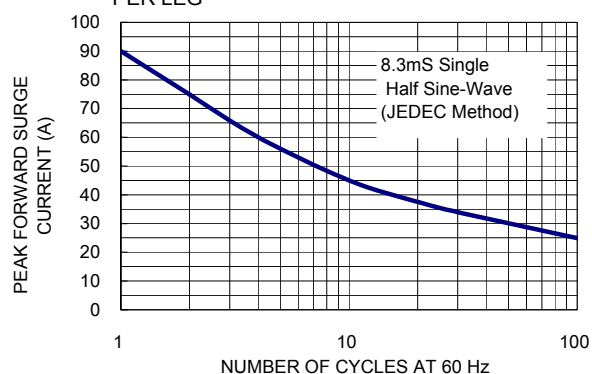


FIG.3 TYPICAL REVERSE CHARACTERISTICS PER LEG

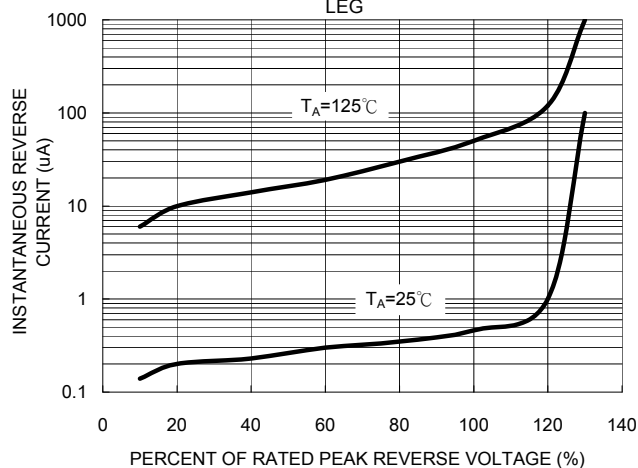


FIG.4 TYPICAL FORWARD CHARACTERISTICS PER LEG.

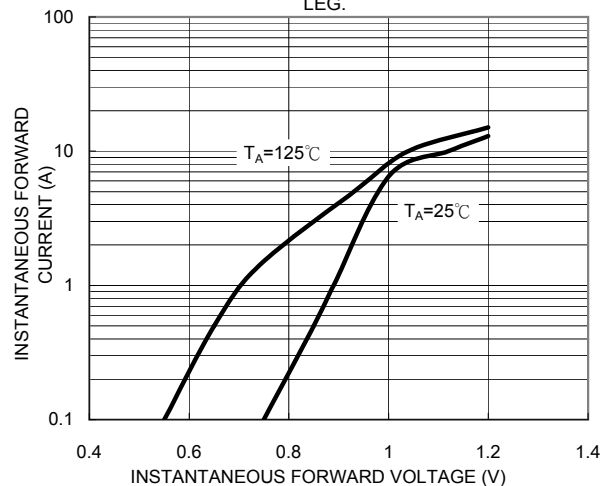


FIG.5 FORWARD POWER DISSIPATION

