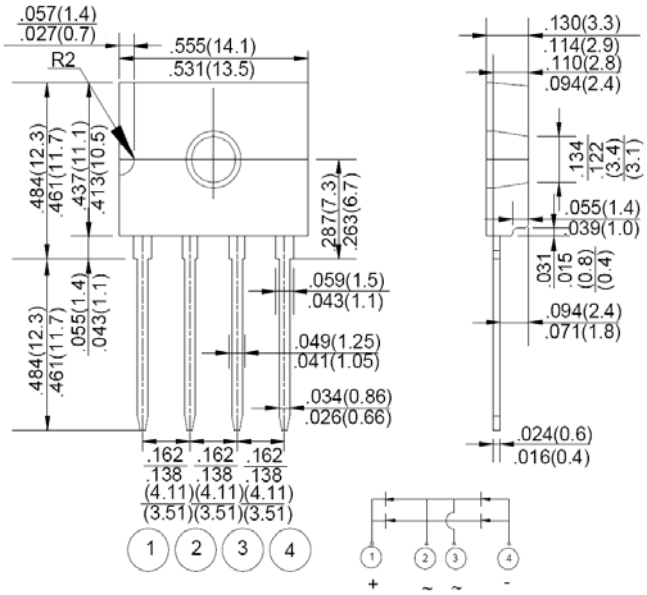
TAIWAN SEMICONDUCTOR

UR4KB60 - UR4KB100

Single Phase 4.0AMPS. Glass Passivated Bridge Rectifiers

D3K



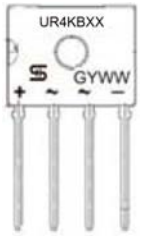
Features

- ✧ UL Recoganized 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℃/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

UR4KBXX	= Specific Device Code
G	= Green Compound
Y	= Year
WW	= Work Week

Maximum Ratings and Electrical Characteristics

Rating at 25 ℃ 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	UR4KB 60	UR4KB 80	UR4KB 100	Unit
Maximum Repetitive 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 60Hz sine wave resistance load Without heat sink T_A=120℃ With heat sink T_A=138℃	$I_{F(AV)}$		2 4		A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}		135		A
Rating of fusing (t<8.3ms)	I^2T		75		A^2S
Maximum Instantaneous Forward Voltage (Note 1) @ 2 A	V_F		1		V
Maximum DC Reverse Current at Rated DC Block Voltage	I_R		10		uA
Typical Thermal Resistance	$R_{\theta jA}$ $R_{\theta jC}$ $R_{\theta jL}$		14 8.2 9.3		$^OC/W$
Operating Temperature Range	T_J		- 55 to + 150		^OC
Storage Temperature Range	T_{STG}		- 55 to + 150		^OC

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

RATINGS AND CHARACTERISTIC CURVES (UR4KB60 THRU UR4KB100)

FIG.1 FORWARD CURRENT DERATING CURVE

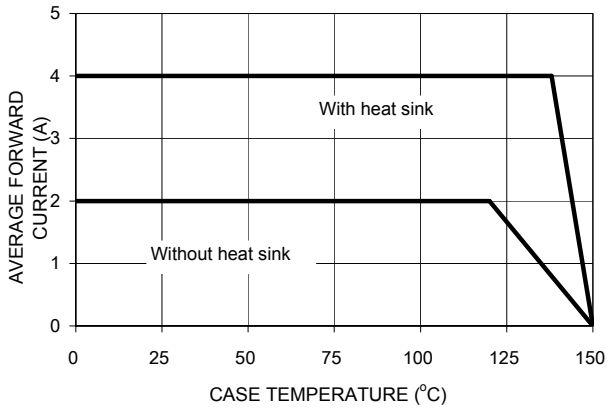


FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

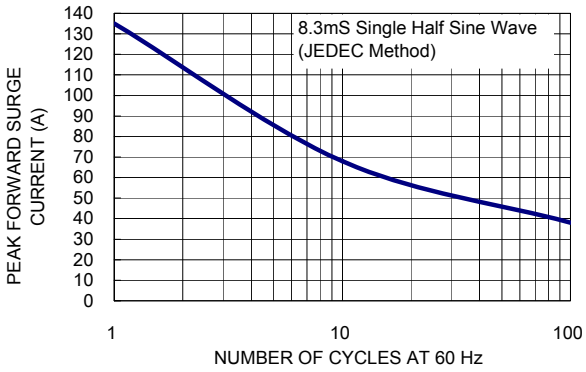


FIG. 3 TYPICAL REVERSE CHARACTERISTICS

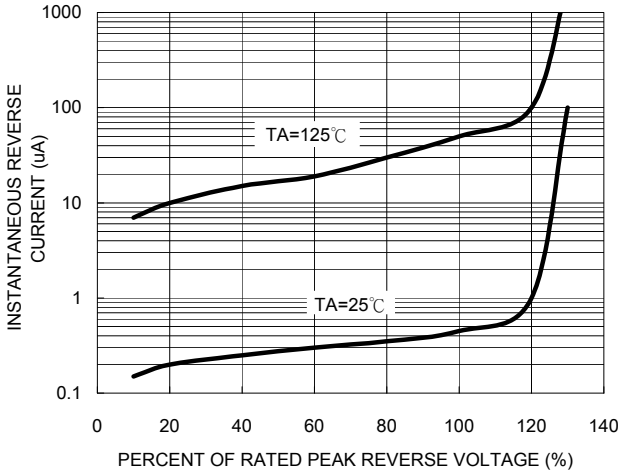


FIG. 4 TYPICAL FORWARD CHARACTERISRICS

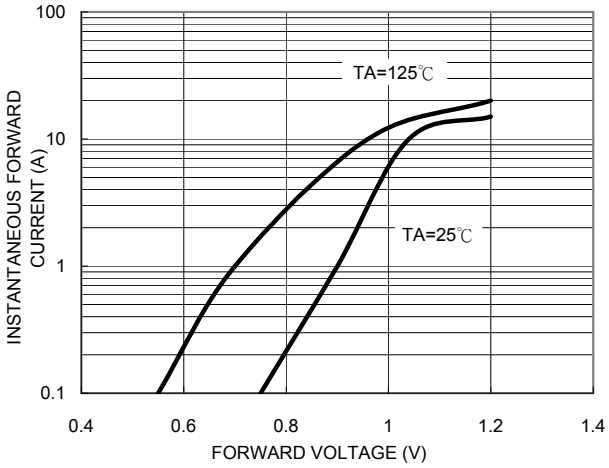


FIG. 5 FORWARD POWER DISSIPATION