

## Glass Passivated Bridge Rectifiers

### FEATURES

- Ideal for printed circuit board
- High case dielectric strength
- High surge current capability
- UL Recognized File # E-326243
- Compliant to RoHS Directive 2011/65/EU and in accordance to WEEE 2002/96/EC
- Halogen-free according to IEC 61249-2-21 definition


**D3K**


### MECHANICAL DATA

**Case: D3K**

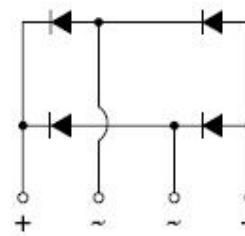
Molding compound, UL flammability classification rating 94V-0  
Base P/N with suffix "G" on packing code - halogen-free

**Terminal:** Matte tin plated leads, solderable per JESD22-B102

Meet JESD 201 class 1A whisker test

**Weight:** 1.24 g (approximately)

**Mounting Torque:** 0.8 N.M max.



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS ( $T_A=25^\circ\text{C}$ unless otherwise noted)					
PARAMETER	SYMBOL	UR2KB 60	UR2KB 80	UR2KB 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 Without heat sink $T_A=25^\circ\text{C}$ 60Hz sine wave resistance load With heat sink $T_C=143^\circ\text{C}$	$I_{F(AV)}$		1.2 2.0		A
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load	$I_{FSM}$		62		A
Rating of fusing ( $t < 8.3\text{ms}$ )	$I^2t$		15.9		$\text{A}^2\text{s}$
Maximum instantaneous forward voltage (Note 1) $I_F = 1\text{ A}$	$V_F$		1.05		V
Maximum DC reverse current at rated DC blocking voltage	$I_R$		10		$\mu\text{A}$
Dielectric Strength (Terminal to Case, AC 1minute)	$V_{dis}$		2		KV
Typical Thermal Resistance	$R_{\theta JC}$ $R_{\theta JL}$ $R_{\theta JA}$		2.3 2.8 13.4		$^\circ\text{C}/\text{W}$
Operating junction temperature range	$T_J$		-55 to +150		$^\circ\text{C}$
Storage temperature range	$T_{STG}$		-55 to +150		$^\circ\text{C}$

Note 1: Pulse Test with  $PW=300\mu\text{s}$ , 1% Duty Cycle

**ORDERING INFORMATION**

PART NO.	PACKING CODE	GREEN COMPOUND CODE	PACKAGE	PACKING
UR2KBx0 (Note 1)	C2	Suffix "G"	D3K	1,500 / BOX

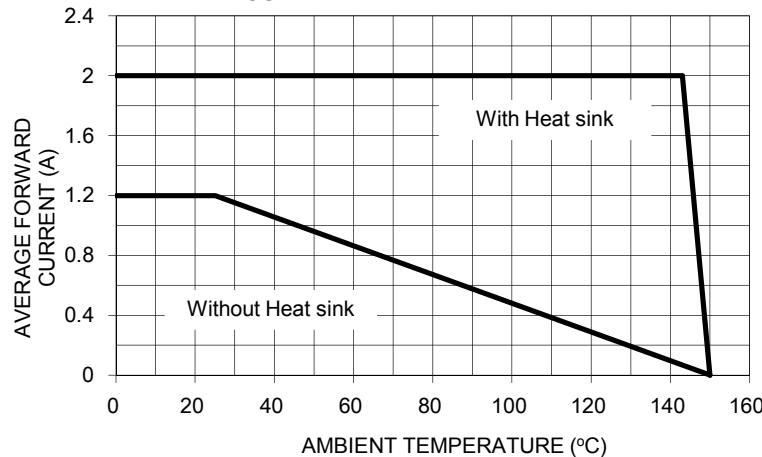
Note 1: "x" defines voltage from 600V (UR2KB60) to 1000V (UR2KB100)

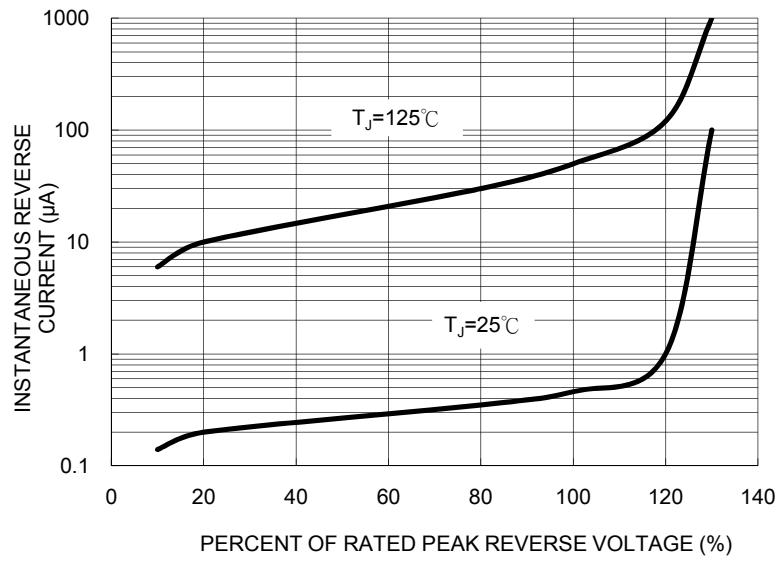
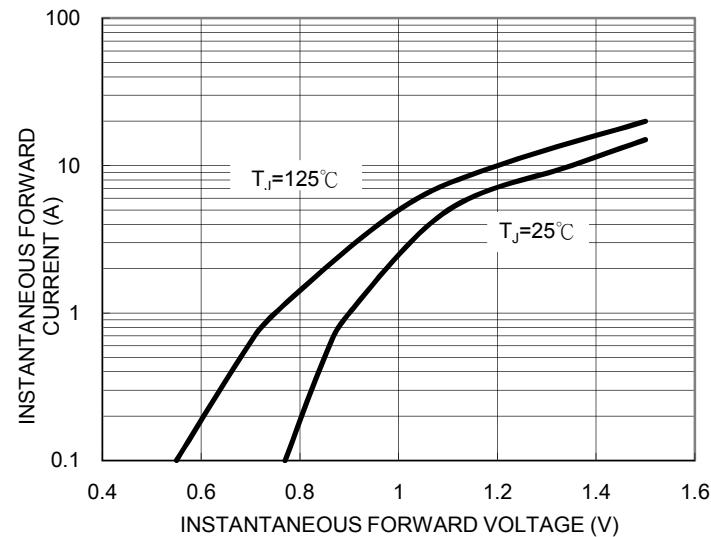
**EXAMPLE**

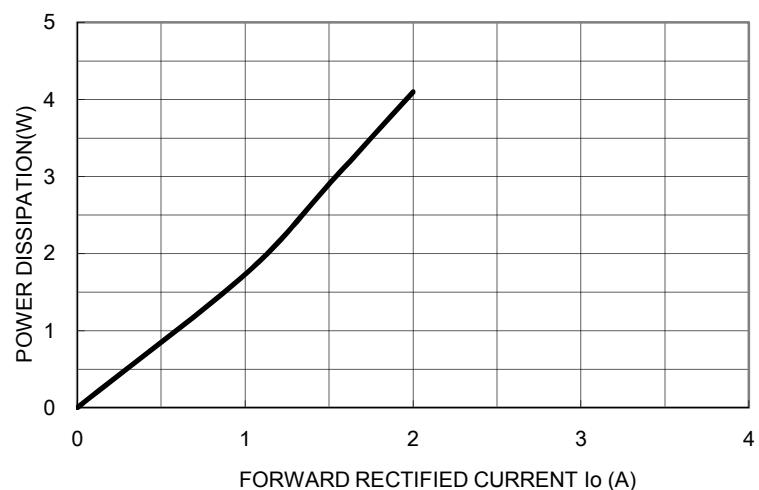
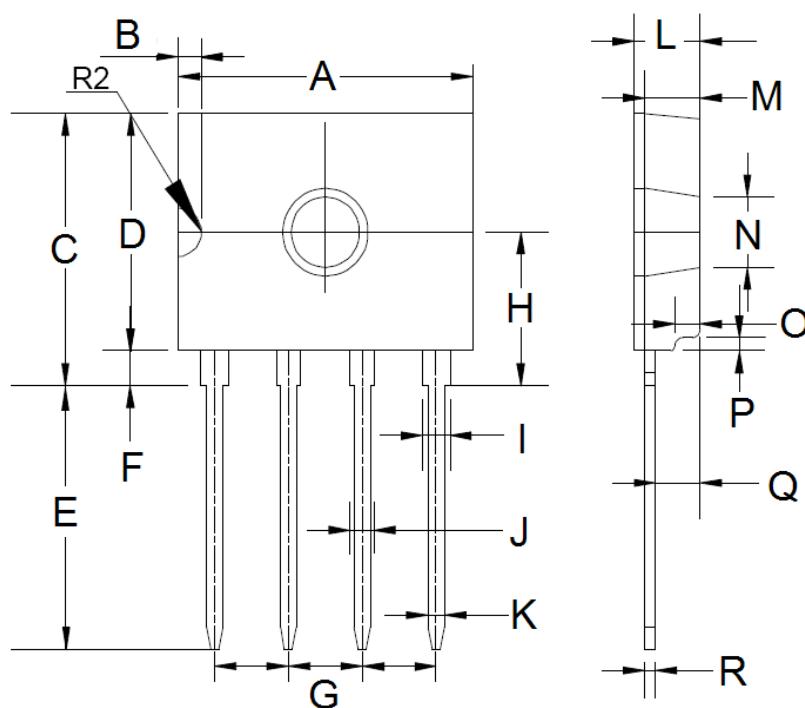
PREFERRED P/N	PART NO.	PACKING CODE	GREEN COMPOUND CODE	DESCRIPTION
UR2KB60 C2	UR2KB60	C2		
UR2KB60 C2G	UR2KB60	C2	G	Green compound

**RATINGS AND CHARACTERISTICS CURVES**

(TA=25°C unless otherwise noted)

**FIG.1 MAXIMUM DERATING CURVE FOR OUTPUT CURRENT**

**FIG.2 MAXIMUM FORWARD SURGE CURRENT**

**FIG. 3 TYPICAL REVERSE CHARACTERISTICS**

**FIG. 4 TYPICAL FORWARD CHARACTERISTICS**


**FIG. 5 FORWARD POWER DISSIPATION**

**PACKAGE OUTLINE DIMENSIONS**


DIM.	Unit (mm)		Unit (inch)	
	Min	Max	Min	Max
A	13.50	14.10	0.531	0.555
B	0.70	1.40	0.028	0.055
C	11.70	12.30	0.461	0.484
D	10.50	11.10	0.413	0.437
E	11.70	12.30	0.461	0.484
F	1.10	1.40	0.043	0.055
G	3.51	4.11	0.138	0.162
H	6.70	7.30	0.264	0.287
I	1.10	1.50	0.043	0.059
J	1.05	1.25	0.041	0.049
K	0.66	0.86	0.026	0.034
L	2.90	3.30	0.114	0.130
M	2.40	2.80	0.094	0.110
N	3.10	3.40	0.122	0.134
O	1.00	1.40	0.039	0.055
P	0.40	0.80	0.016	0.031
Q	1.80	2.40	0.071	0.094
R	0.40	0.60	0.016	0.024

**MARKING DIAGRAM**


P/N = Specific Device Code  
 G = Green Compound  
 YWW = Date Code  
 F = Factory Code

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