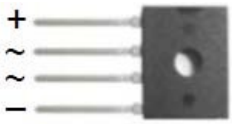
Glass Passivated Bridge Rectifiers

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

Pb-Free

RoHS COMPLIANT

MECHANICAL DATA

Case: D3K

Molding compound, UL flammability classification rating 94V-0

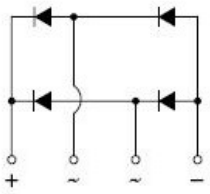
Base P/N with suffix "G" on packing code - halogen-free

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℃ 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℃ 60Hz sine wave resistance load With heat sink T_C=143℃	$I_{F(AV)}$	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 < 8.3ms)	I^2t	15.9			A^2s
Maximum instantaneous forward voltage (Note 1) I_F= 1 A	V_F	1.05			V
Maximum DC reverse current at rated DC blocking voltage	I_R	10			μA
Dielectric Strength (Terminal to Case, AC 1minute)	Vdis	2			KV
Typical Thermal Resistance	$R_{\theta JC}$ $R_{\theta JL}$ $R_{\theta JA}$	2.3 2.8 13.4			°C/W
Operating junction temperature range	T_J	- 55 to +150			°C
Storage temperature range	T_{STG}	- 55 to +150			°C

Note 1: Pulse Test with PW=300μs,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℃ unless otherwise noted)

FIG.1 MAXIMUM DERATING CURVE FOR OUTPUT CURRENT

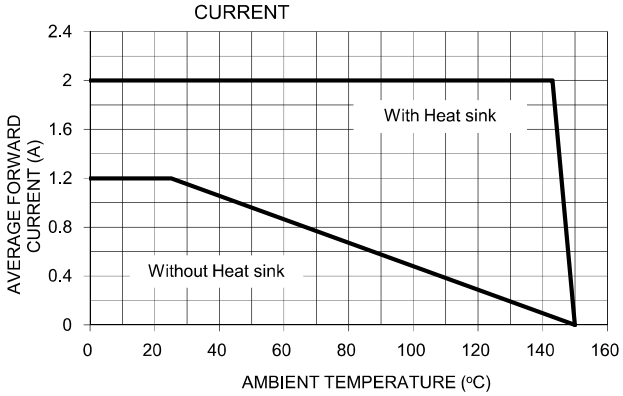


FIG.2 MAXIMUM FORWARD SURGE CURRENT

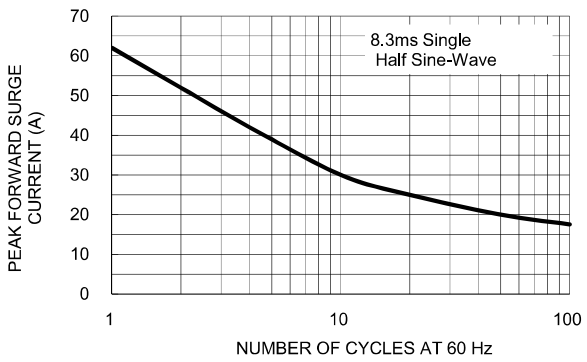


FIG. 3 TYPICAL REVERSE CHARACTERISTICS

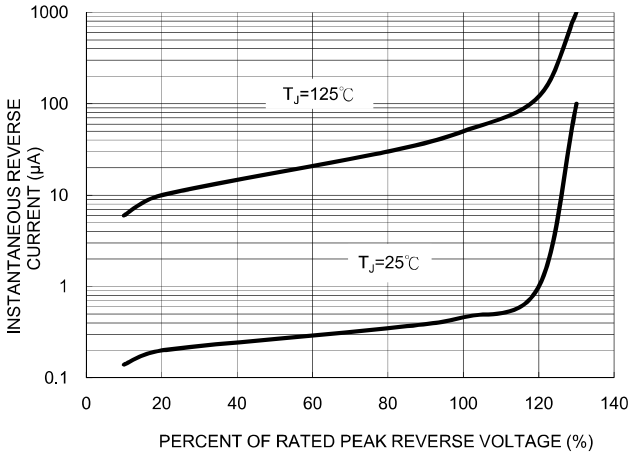


FIG. 4 TYPICAL FORWARD CHARACTERISTICS

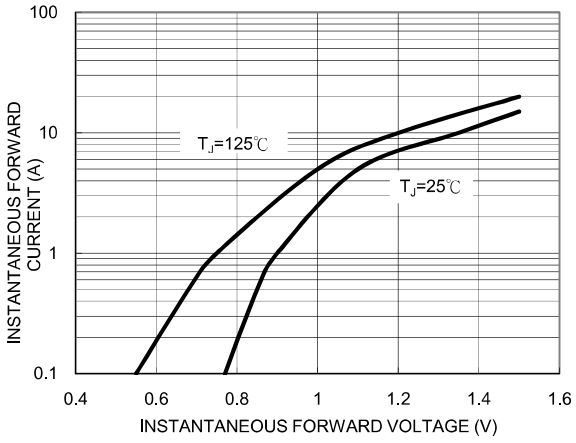
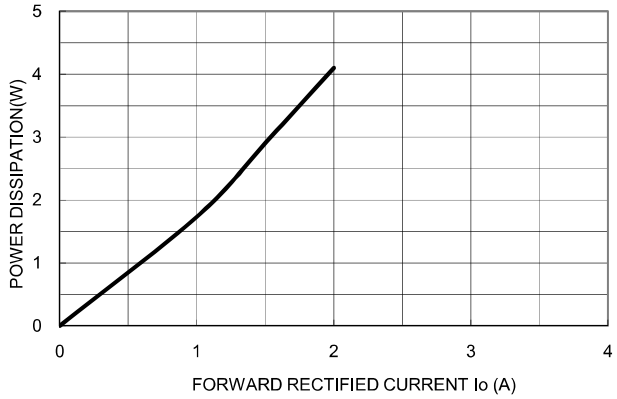
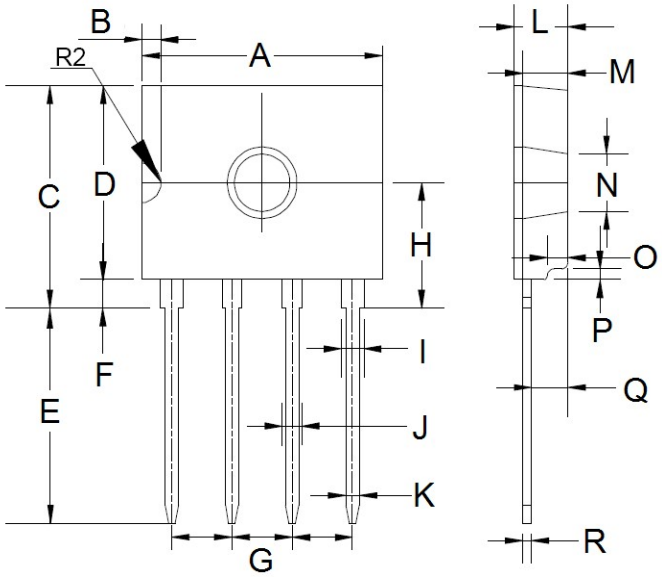


FIG. 5 FORWARD POWER DISSIPATION

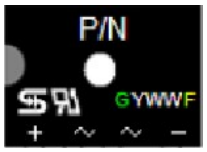


PACKAGE OUTLINE DIMENSIONS



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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