

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



MECHANICAL DATA

Case: D3K

Molding compound, UL flammability classification rating 94V-0

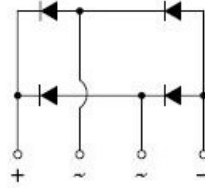
Base P/N with suffix "G" on packing code - halogen-free

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°C unless otherwise noted) | | | | | |
|--|--------------------|---|-------------|--------------|------------------|
| PARAMETER | 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 | I _{F(AV)} | Without heat sink T _C =120°C | | | A |
| | | With heat sink T _C =138°C | | | |
| Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load | I _{FSM} | 135 | | | A |
| Rating of fusing (t < 8.3ms) | I ² t | 75 | | | A ² s |
| Maximum instantaneous forward voltage (Note 1) I _F = 2 A | V _F | 1.0 | | | V |
| Maximum DC reverse current at rated DC blocking voltage | I _R | 10 | | | μA |
| Typical thermal resistance | R _{θJC} | 8.2 | | | °C/W |
| | R _{θJL} | 9.3 | | | |
| | R _{θJA} | 14 | | | |
| 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 |
|---------------------|--------------|---------------------|---------|-------------|
| UR4KBx0 (Note 1) | C2 | Suffix "G" | D3K | 1,500 / BOX |

Note 1: "x" defines voltage from 600V (UR4KB60) to 1000V (UR4KB100)

EXAMPLE

| PREFERRED P/N | PART NO. | PACKING CODE | GREEN COMPOUND CODE | DESCRIPTION |
|---------------|----------|--------------|---------------------|----------------|
| UR4KB60 C2 | UR4KB60 | C2 | | |
| UR4KB60 C2G | UR4KB60 | C2 | G | Green compound |

RATINGS AND CHARACTERISTICS CURVES

(TA=25°C unless otherwise noted)

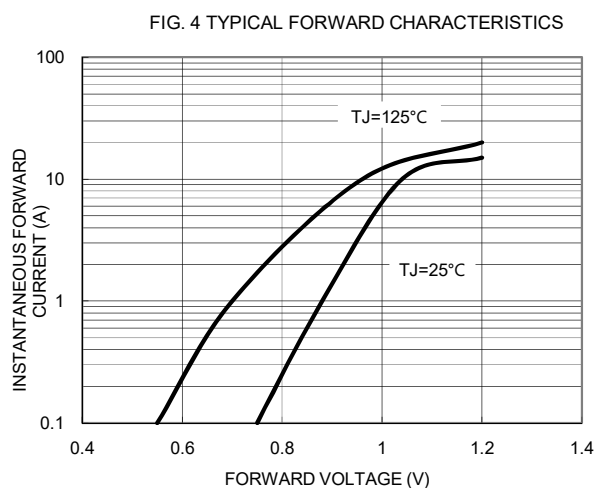
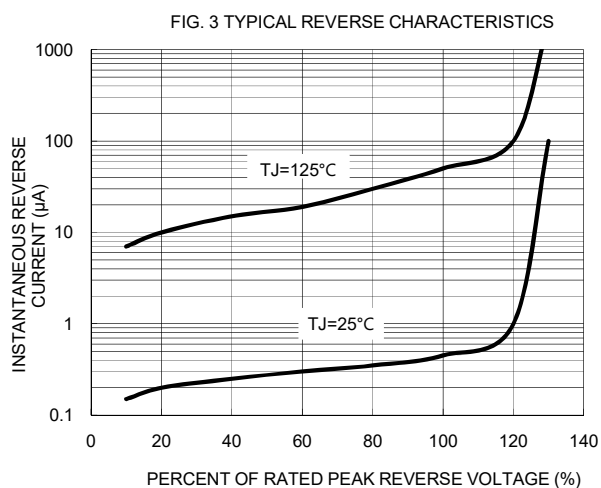
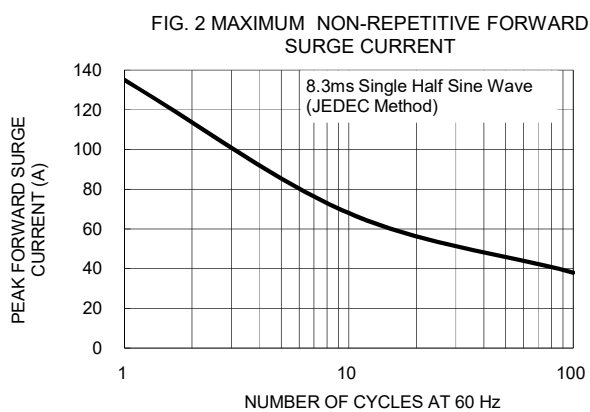
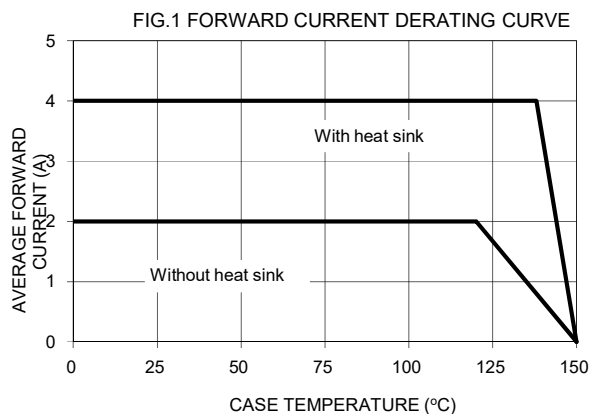
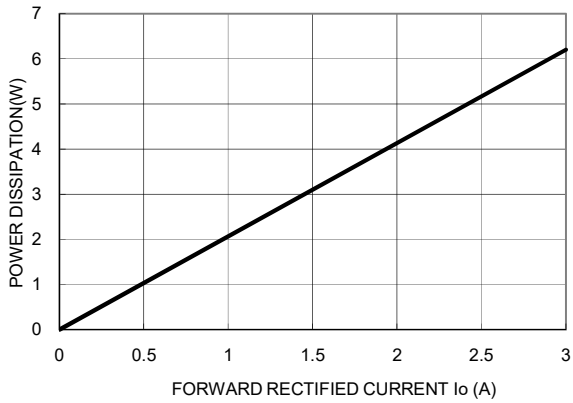
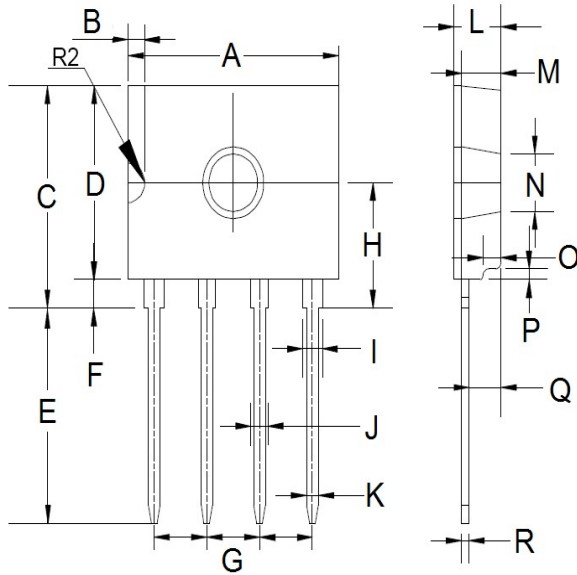


FIG. 5 FORWARD POWER DISSIPATION



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
- YWWF = Date Code
- F = Factory Code

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