

UD4KB80

Bridge Diodes

800V, 4.0A

Feature

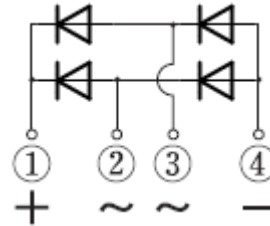
- Compact SIP
- UL E142422
- Pb free terminal
- RoHS:Yes

OUTLINE

Package (House Name): D3K



Equivalent circuit



Absolute Maximum Ratings (unless otherwise specified : Tc=25°C)

| Item | Symbol | Conditions | Ratings | Unit |
|---------------------------------|--------------------|---|------------|------------------|
| Storage temperature | T _{stg} | | -55 to 150 | °C |
| Junction temperature | T _j | | 150 | °C |
| Repetitive peak reverse voltage | V _{RRM} | | 800 | V |
| Average forward current | I _{F(AV)} | 60Hz sine wave, Resistance load, With heatsink, T _c =138°C | 4 | A |
| Average forward current | I _{F(AV)} | 60Hz sine wave, Resistance load, Without heatsink, T _a =30°C | 1.3 | A |
| Surge forward current | I _{FSM} | 60Hz sine wave, Non-repetitive 1 cycle peak value, T _j =25°C | 135 | A |
| Current squared time | I ² t | 3ms ≤ t < 8.3ms, T _j =25°C, per diode | 75 | A ² s |
| Dielectric strength | V _{dis} | Terminals to case, AC 1 minute | 2 | kV |
| Mounting torque | TOR | (Recommended torque : 0.5N·m) | 0.8 | N·m |

※ : See the original Specifications

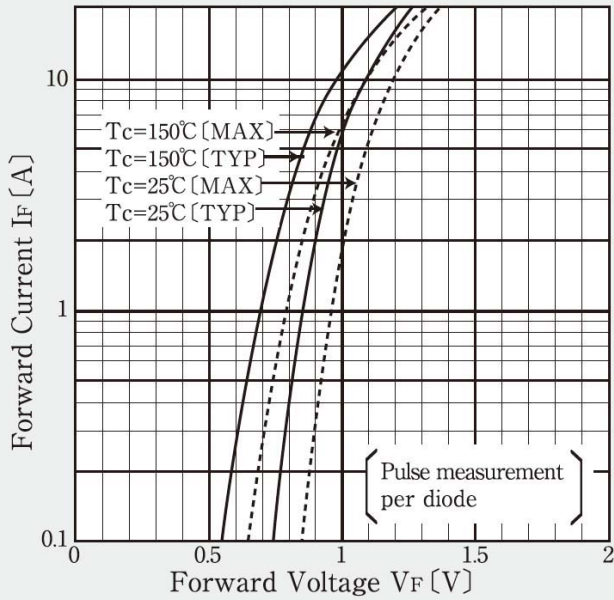
Electrical Characteristics (unless otherwise specified : Tc=25°C)

| Item | Symbol | Conditions | Ratings | | | Unit |
|--------------------|---------------|---|---------|-----|-----|---------------|
| | | | MIN | TYP | MAX | |
| Forward voltage | V_F | $I_F=2A$, Pulse measurement, per diode | | | 1 | V |
| Reverse current | I_R | $V_R=800V$, Pulse measurement, per diode | | | 10 | μA |
| Thermal resistance | $R_{th(j-c)}$ | Junction to case, With heatsink | | | 1.5 | $^{\circ}C/W$ |
| Thermal resistance | $R_{th(j-l)}$ | Junction to lead, Without heatsink | | | 15 | $^{\circ}C/W$ |
| Thermal resistance | $R_{th(j-a)}$ | Junction to ambient, Without heatsink | | | 55 | $^{\circ}C/W$ |

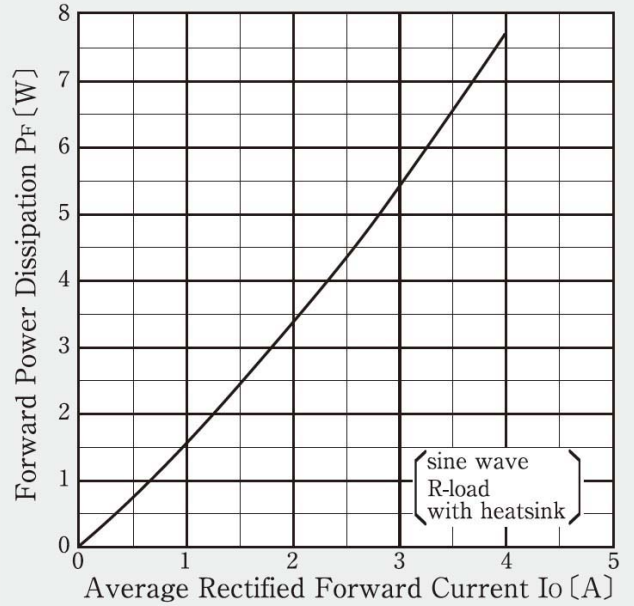
* :See the original Specifications

CHARACTERISTIC DIAGRAMS

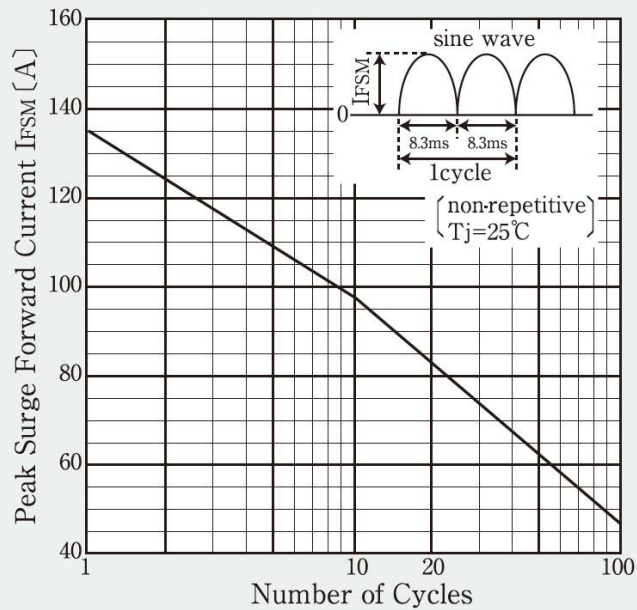
Forward Voltage



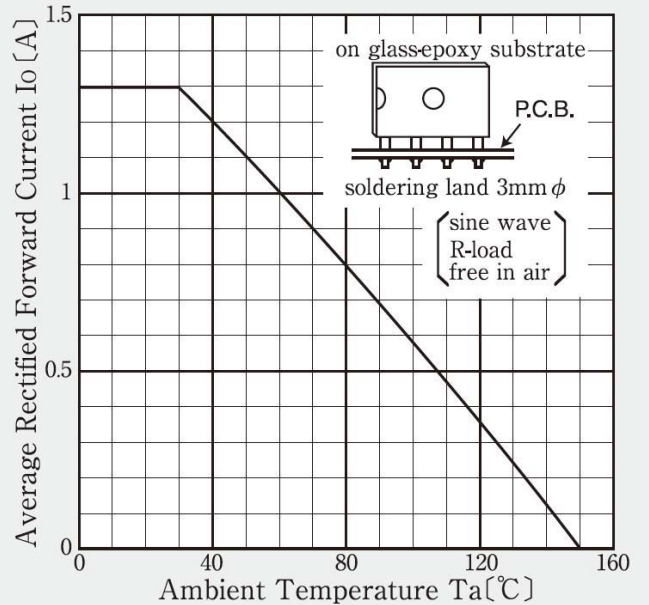
Forward Power Dissipation



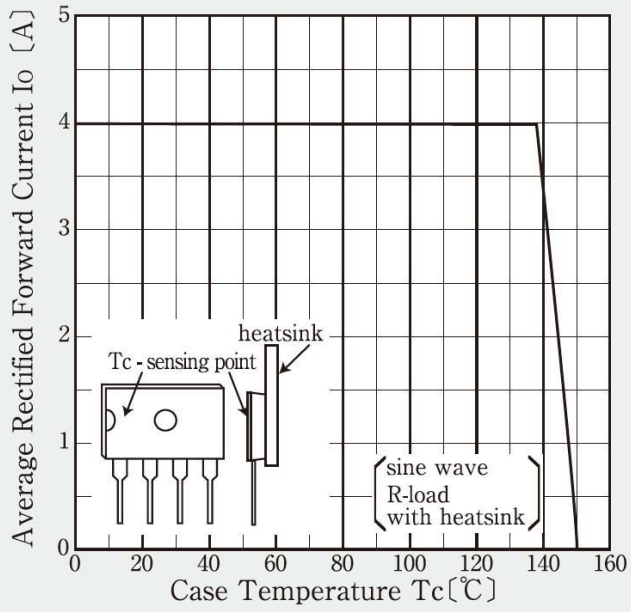
Peak Surge Forward Current Capability



Derating Curve

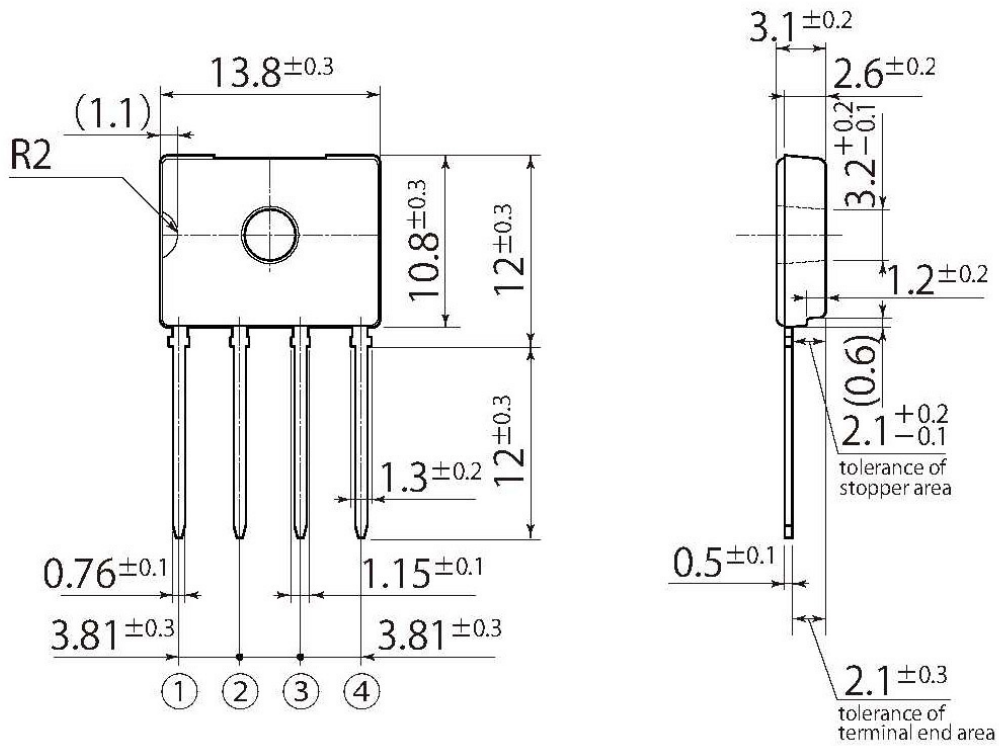


Derating Curve



D1

| | |
|------------|-----|
| JEDEC Code | — |
| JEITA Code | — |
| House Name | D3K |



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