

# UD4KB80

## Bridge Diodes

800V, 4.0A

### Feature

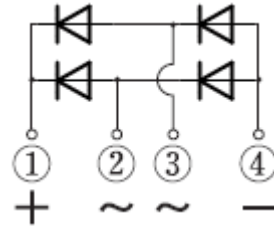
- Compact SIP
- UL E142422
- Pb free terminal
- RoHS:Yes

### OUTLINE

Package (House Name): D3K



### Equivalent circuit



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

Item	Symbol	Conditions	Ratings	Unit
Storage temperature	T <sub>stg</sub>		-55 to 150	°C
Junction temperature	T <sub>j</sub>		150	°C
Repetitive peak reverse voltage	V <sub>RRM</sub>		800	V
Average forward current	I <sub>F(AV)</sub>	60Hz sine wave, Resistance load, With heatsink, T <sub>c</sub> =138°C	4	A
Average forward current	I <sub>F(AV)</sub>	60Hz sine wave, Resistance load, Without heatsink, T <sub>a</sub> =30°C	1.3	A
Surge forward current	I <sub>FSM</sub>	50Hz sine wave, Non-repetitive 1 cycle peak value, T <sub>j</sub> =25°C	135	A
Current squared time	I <sup>2</sup> t	3ms ≤ t < 8.3ms, T <sub>j</sub> =25°C, per diode	75	A <sup>2</sup> s
Dielectric strength	V <sub>dis</sub>	Terminals to case, AC 1 minute	2	kV
Mounting torque	TOR	(Recommended torque : 0.5N·m)	0.8	N·m

※ : See the original Specifications

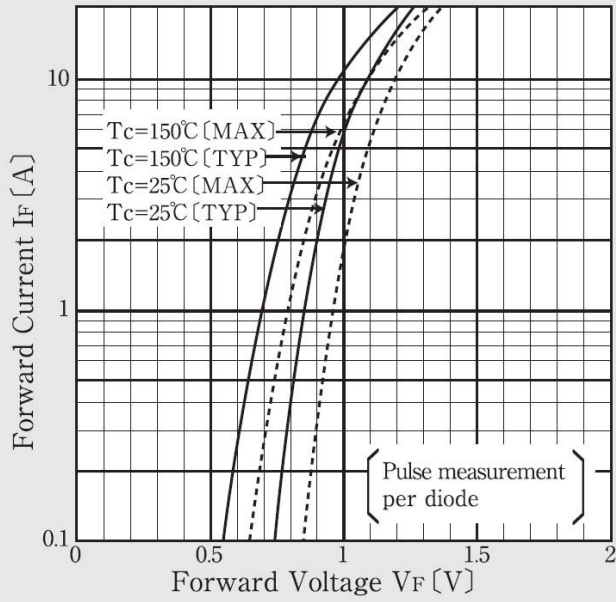
**Electrical Characteristics** (unless otherwise specified : Tc=25°C)

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	$\mu A$
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	$^{\circ}C/W$

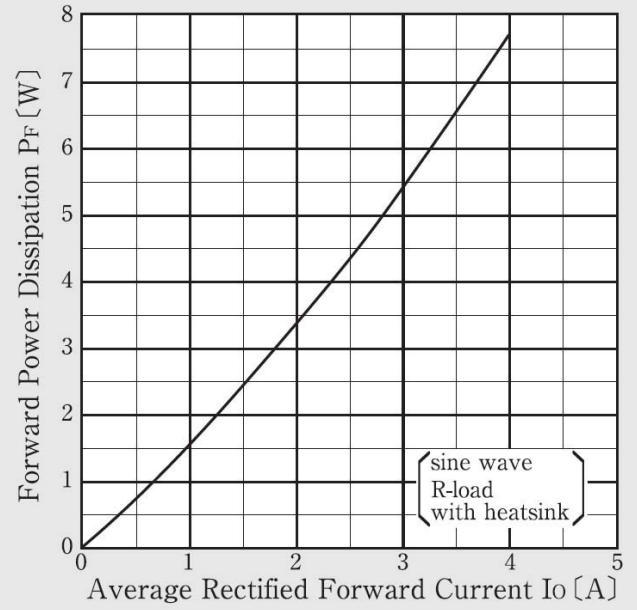
\* :See the original Specifications

# CHARACTERISTIC DIAGRAMS

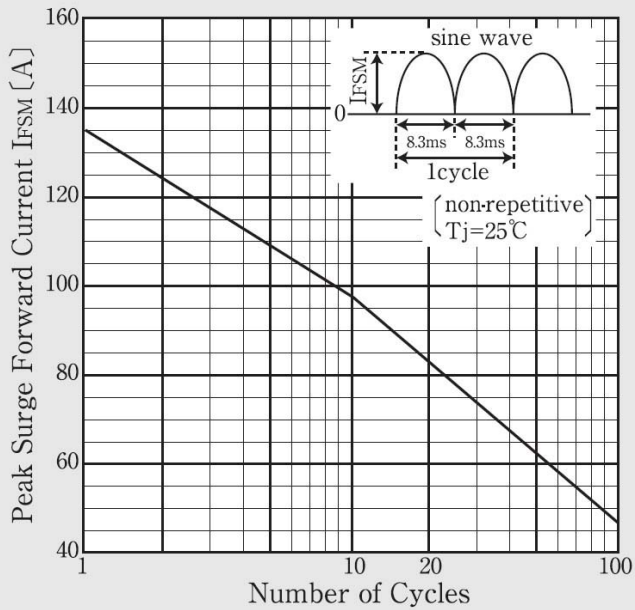
### Forward Voltage



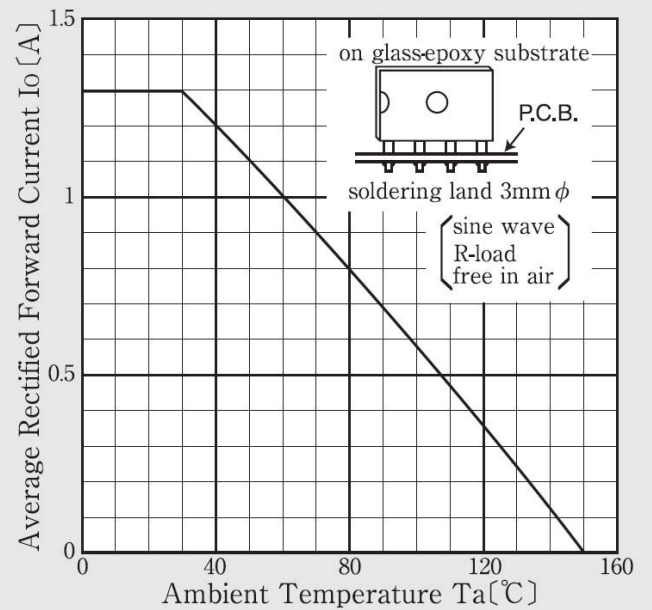
### Forward Power Dissipation



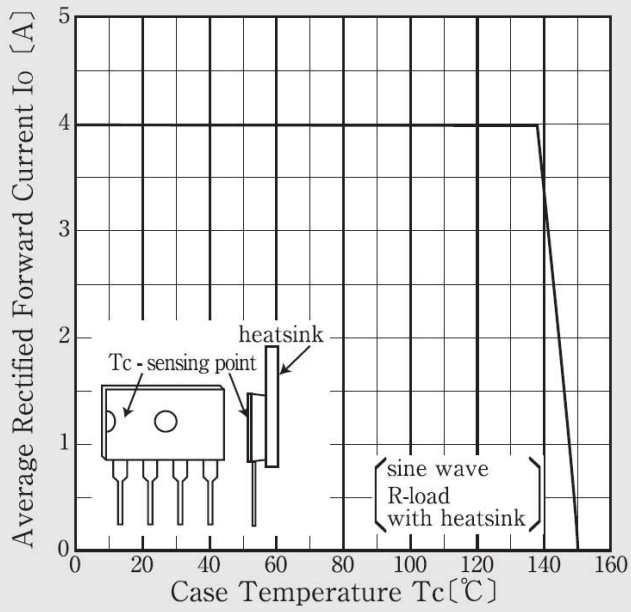
### Peak Surge Forward Current Capability



### Derating Curve $T_a$ - $I_o$

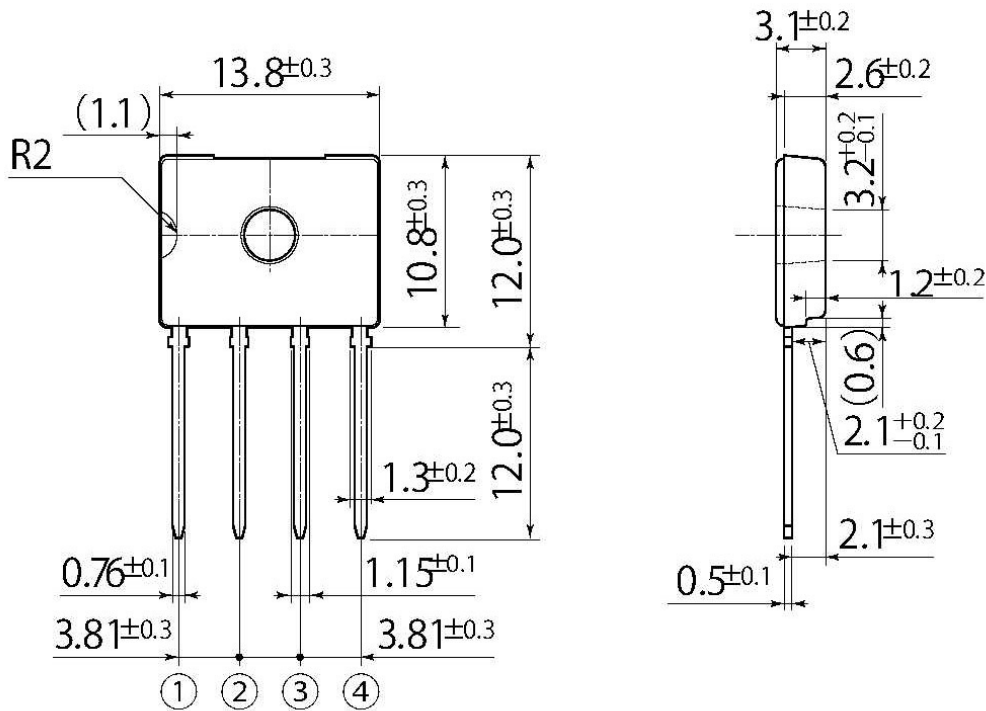


Derating Curve Tc-Io



D1

JEDEC Code	—
JEITA Code	—
House Name	D3K



## Notes

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