

# UD3KB80

Bridge Diodes  
800V, 3.0A

**Feature**

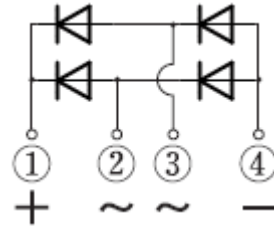
- Compact SIP
- UL E142422
- Pb free terminal
- RoHS:Yes

**OUTLINE**

Package (House Name): D3K



**Equivalent circuit**



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

Item	Symbol	Conditions	Ratings	Unit
Storage temperature	Tstg		-55 to 150	°C
Junction temperature	Tj		150	°C
Repetitive peak reverse voltage	VRRM		800	V
Average forward current	IF(AV)	60Hz sine wave, Resistance load, With heatsink, Tc=140°C	3	A
Average forward current	IF(AV)	60Hz sine wave, Resistance load, Without heatsink, Ta=29°C	1.2	A
Surge forward current	IFSM	60Hz sine wave, Non-repetitive 1 cycle peak value, Tj=25°C	90	A
Current squared time	I <sup>2</sup> t	3ms ≤ t < 8.3ms, Tj=25°C, per diode	35	A <sup>2</sup> s
Dielectric strength	Vdis	Terminals to case, AC 1 minute	2	kV
Mounting torque	TOR	(Recommended torque : 0.5N·m)	0.8	N·m

※ : See the original Specifications

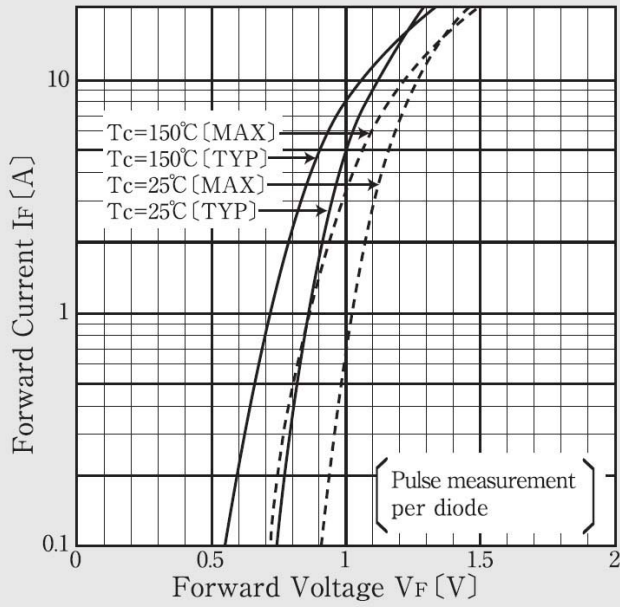
**Electrical Characteristics** (unless otherwise specified : Tc=25°C)

Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	$V_F$	$I_F=1.5A$ , Pulse measurement, per diode			1.05	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	$^{\circ}C/W$

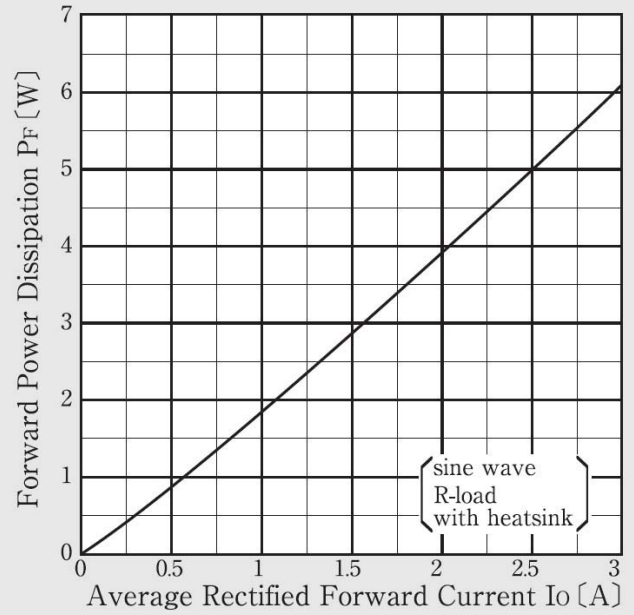
\* :See the original Specifications

# CHARACTERISTIC DIAGRAMS

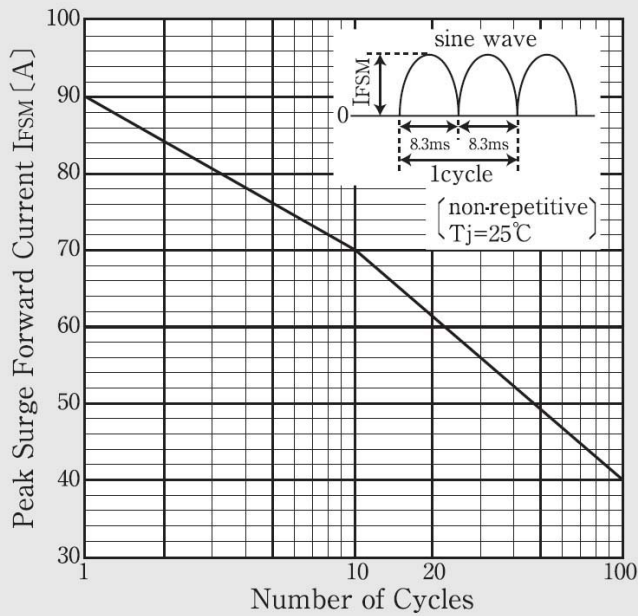
### Forward Voltage



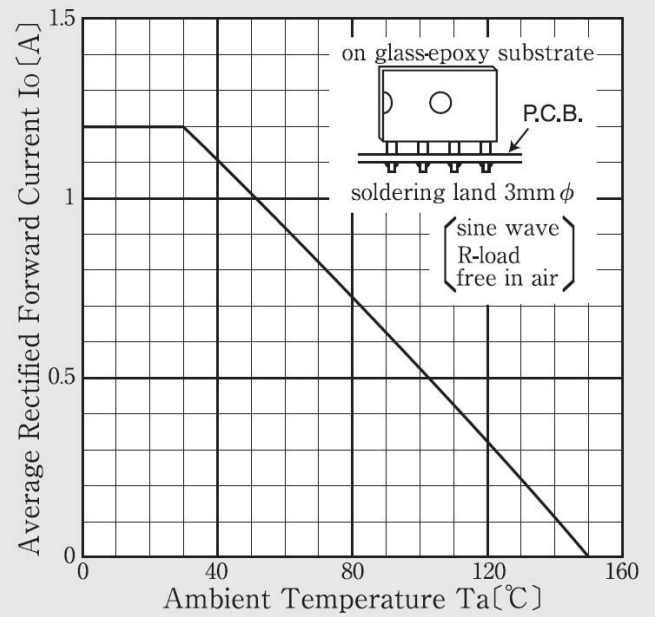
### Forward Power Dissipation



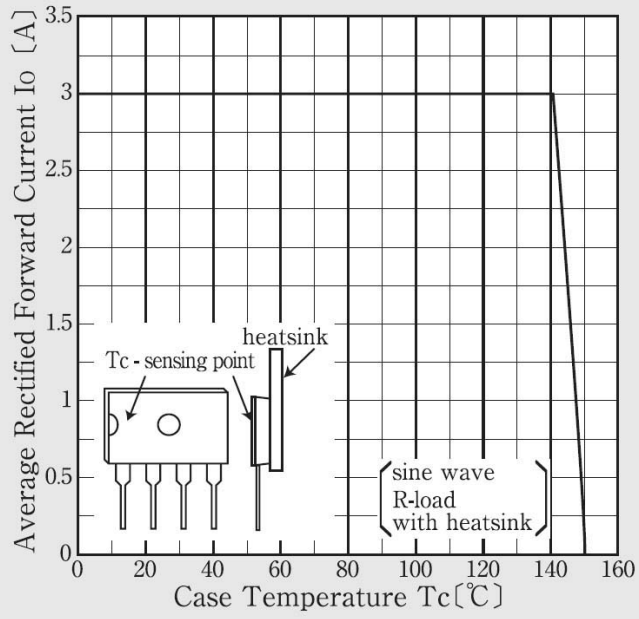
### Peak Surge Forward Current Capability



### Derating Curve

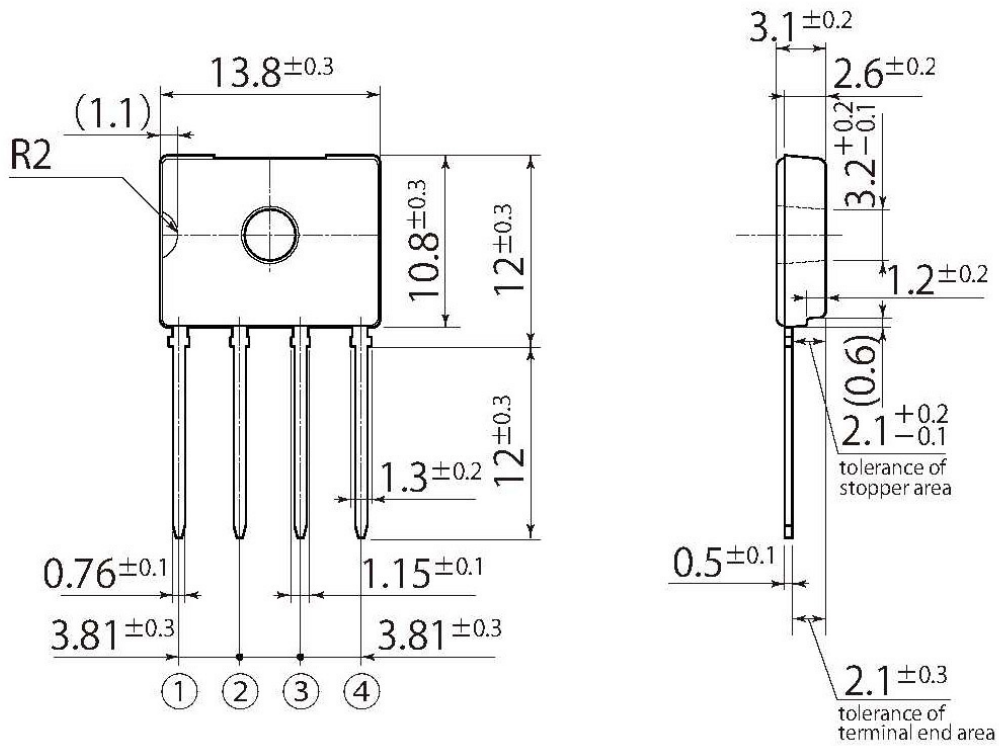


### Derating Curve



D1

JEDEC Code	—
JEITA Code	—
House Name	D3K



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