

UD8KBA80

Bridge Diodes

800V, 8A

Feature

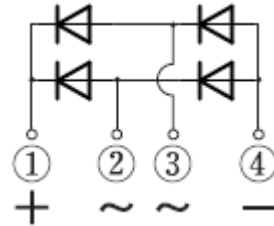
- Compact SIP
- UL E142422
- Pb free terminal
- RoHS:Yes

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 =126°C	8	A
Average forward current	I _{F(AV)}	60Hz sine wave, Resistance load, Without heatsink, T _a =25°C	1.4	A
Surge forward current	I _{FSM}	50Hz sine wave, Non-repetitive 1 cycle peak value, T _j =25°C	165	A
Surge forward current	I _{FSM1}	t _p =3ms, T _j =25°C, Non-repetitive	270	A
Current squared time	I ² t	3ms ≤ t < 8.3ms, T _j =25°C	110	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

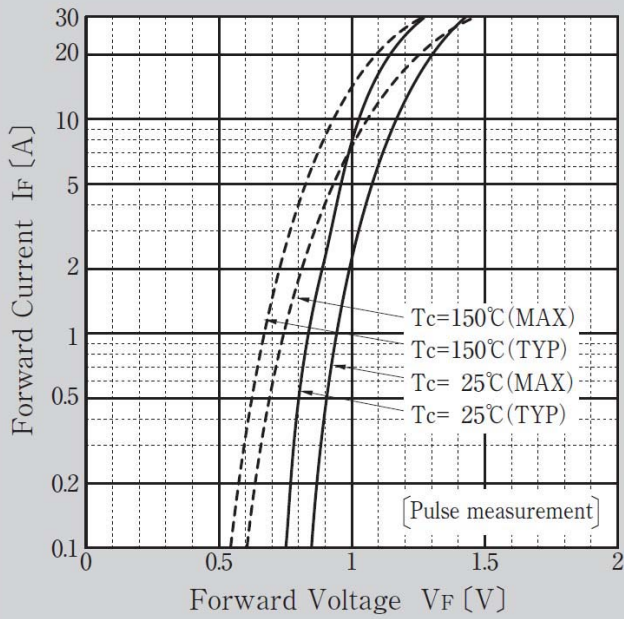
Electrical Characteristics (unless otherwise specified : Tc=25°C)

Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	V_F	$I_F=4A$, Pulse measurement, per diode			1.05	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	$^{\circ}C/W$

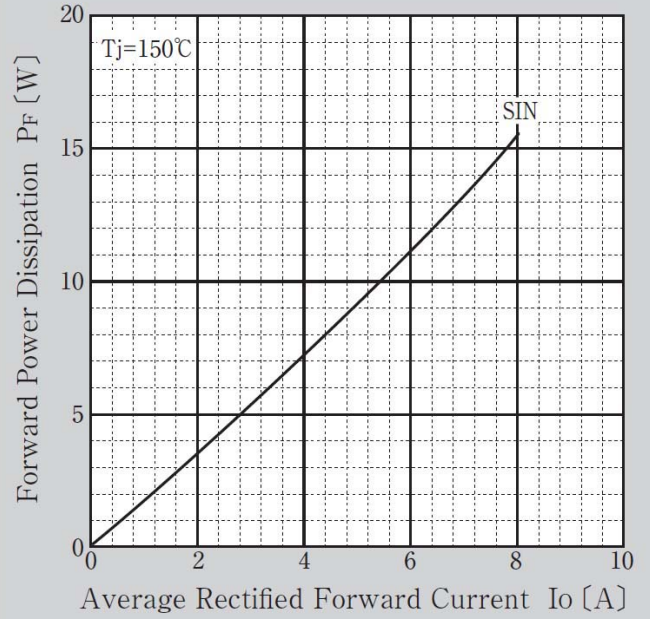
* :See the original Specifications

CHARACTERISTIC DIAGRAMS

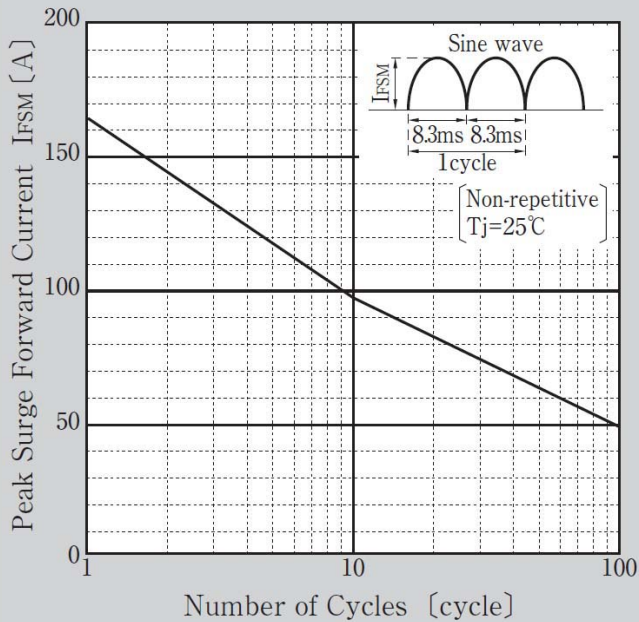
Forward Voltage



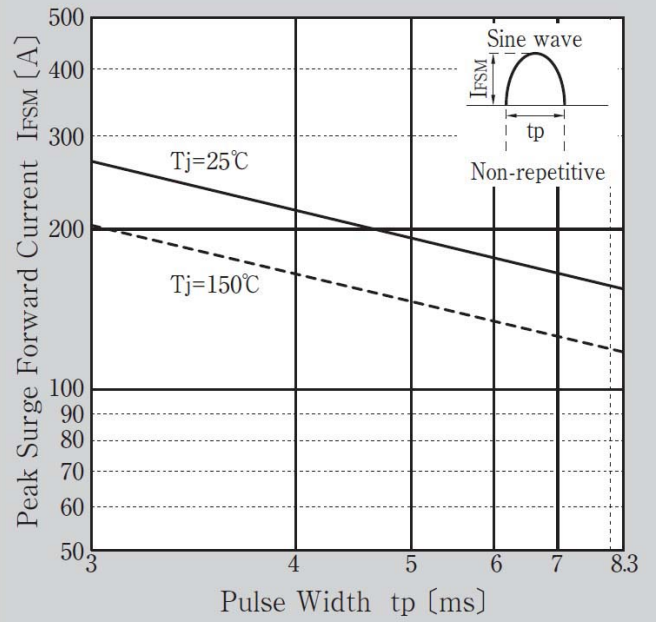
Forward Power Dissipation



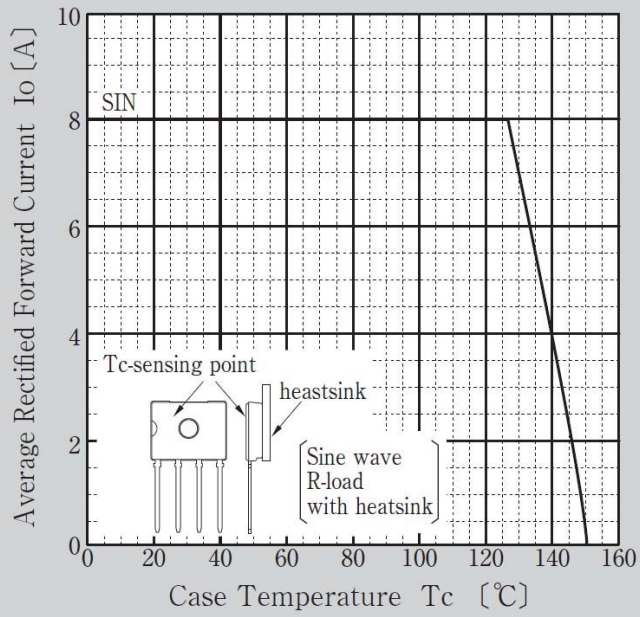
Peak Surge Forward Current Capability



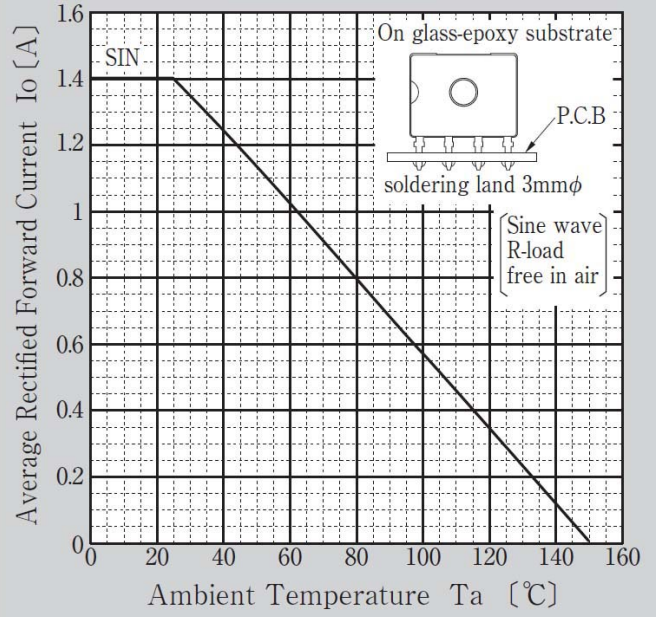
Peak Surge Forward Current Capability



Derating Curve

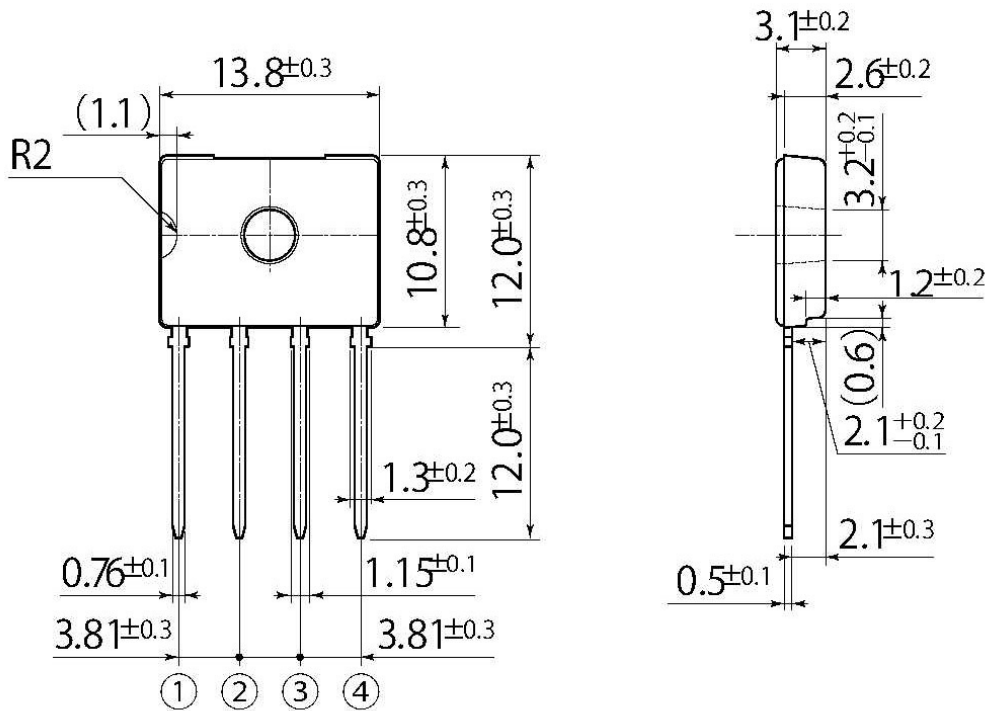


Derating Curve



D1

JEDEC Code	—
JEITA Code	—
House Name	D3K



Notes

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