

# UD6KBA80

Bridge Diodes  
800V, 6A

### Feature

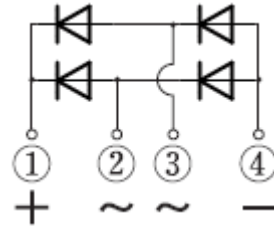
- Compact SIP
- UL E142422
- Pb free terminal
- RoHS:Yes

### 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> =131°C	6	A
Average forward current	I <sub>F(AV)</sub>	60Hz sine wave, Resistance load, Without heatsink, T <sub>a</sub> =25°C	1.3	A
Surge forward current	I <sub>FSM</sub>	60Hz sine wave, Non-repetitive 1 cycle peak value, T <sub>j</sub> =25°C	135	A
Surge forward current	I <sub>FSM1</sub>	t <sub>p</sub> =3ms, T <sub>j</sub> =25°C, Non-repetitive	220	A
Current squared time	I <sup>2</sup> t	3ms ≤ t < 8.3ms, T <sub>j</sub> =25°C	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

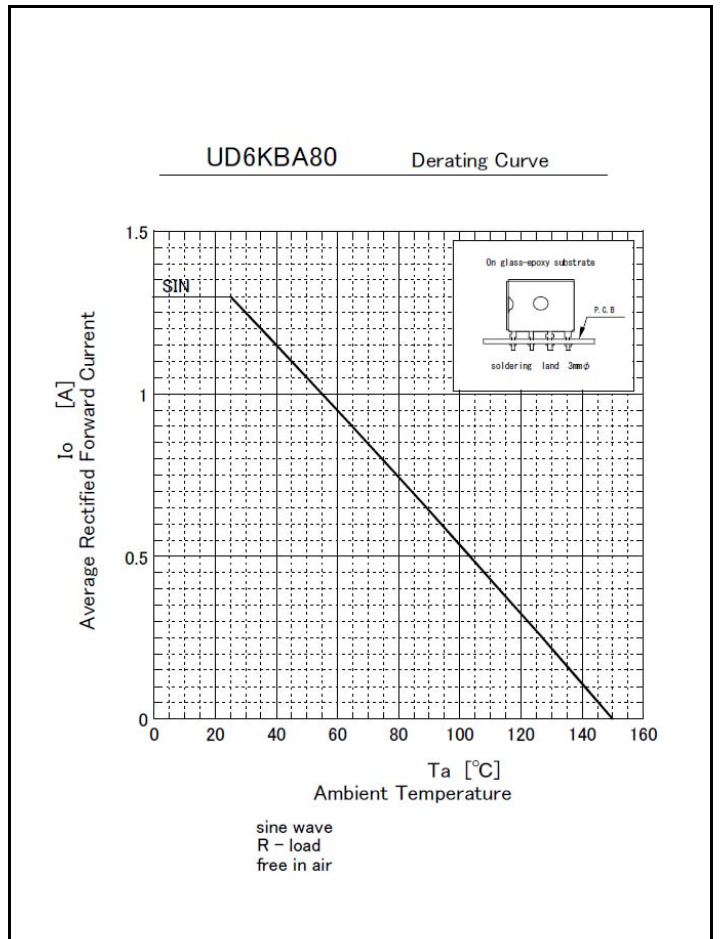
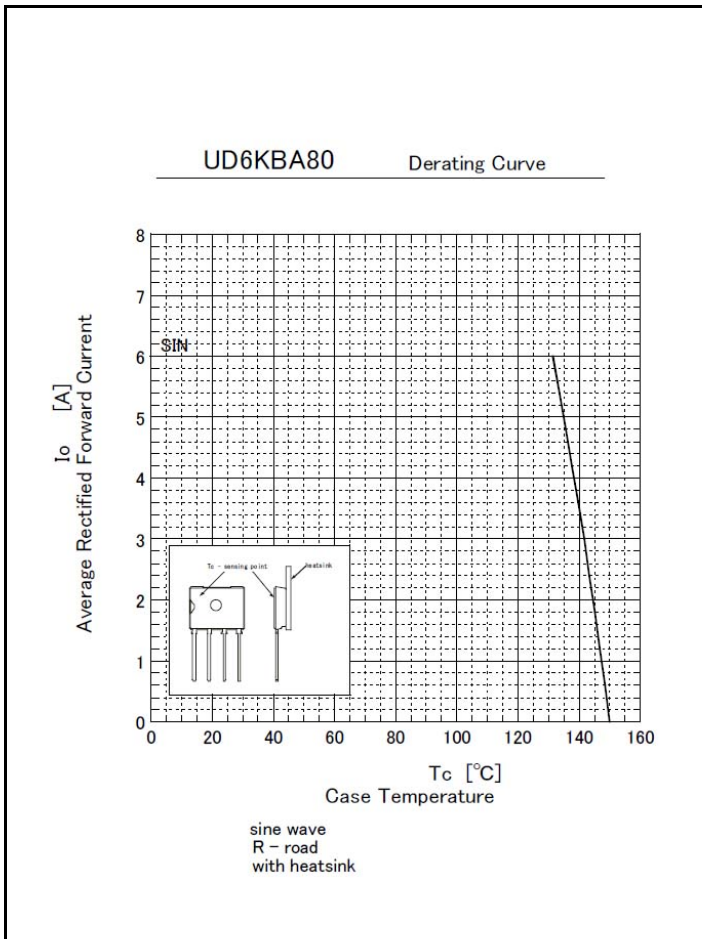
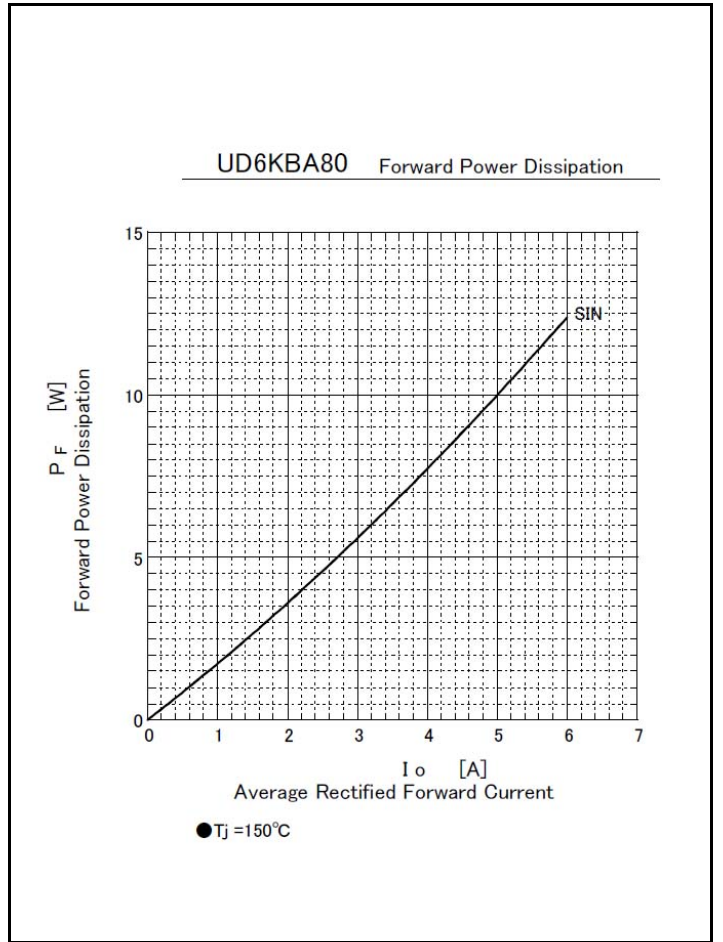
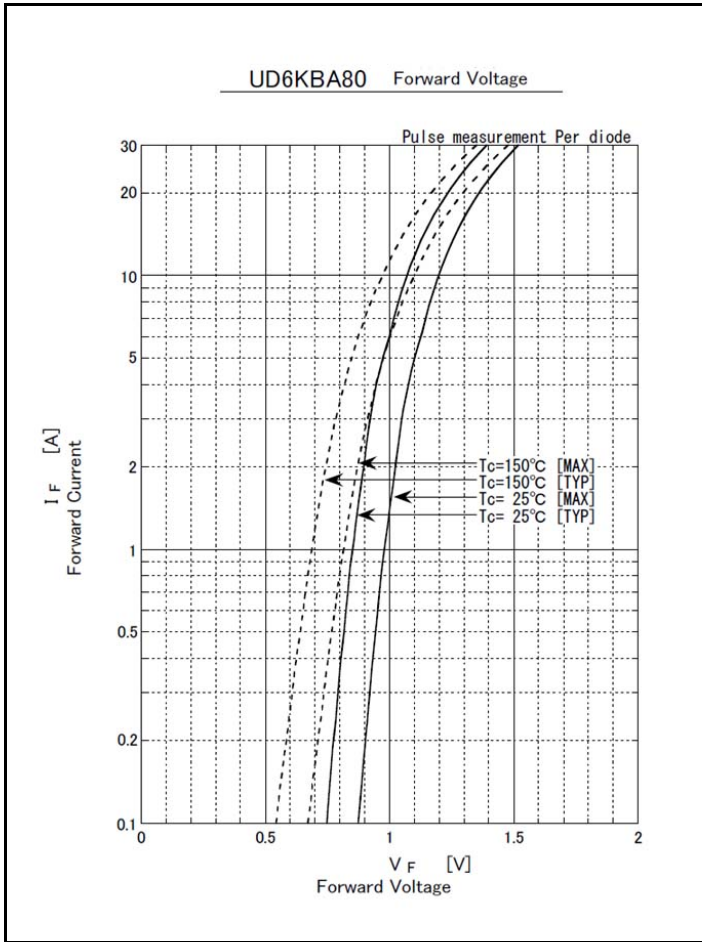
※ :See the original Specifications

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

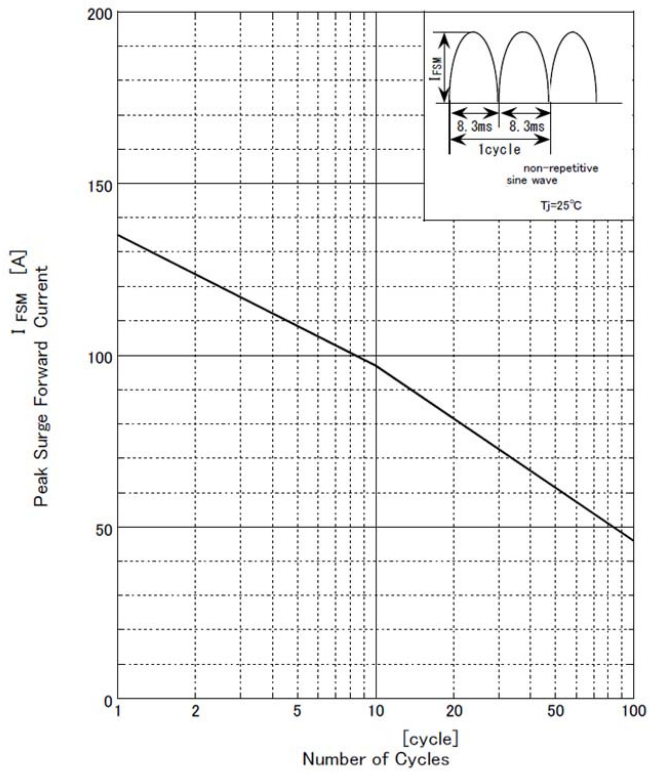
Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	V <sub>F</sub>	I <sub>F</sub> =3A, Pulse measurement, per diode			1.05	V
Reverse current	I <sub>R</sub>	V <sub>R</sub> =800V, Pulse measurement, per diode			10	μA
Thermal resistance	R <sub>th(j-c)</sub>	Junction to case, With heatsink			1.5	°C/W
Thermal resistance	R <sub>th(j-l)</sub>	Junction to lead, Without heatsink			15	°C/W
Thermal resistance	R <sub>th(j-a)</sub>	Junction to ambient, Without heatsink			55	°C/W

\* :See the original Specifications

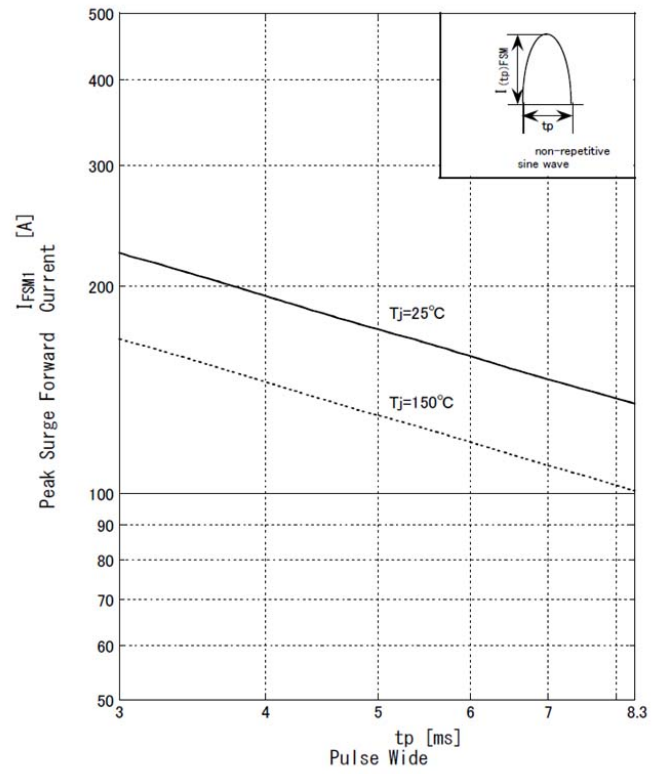
# CHARACTERISTIC DIAGRAMS



UD6KBA80 Peak Surge Forward Capability

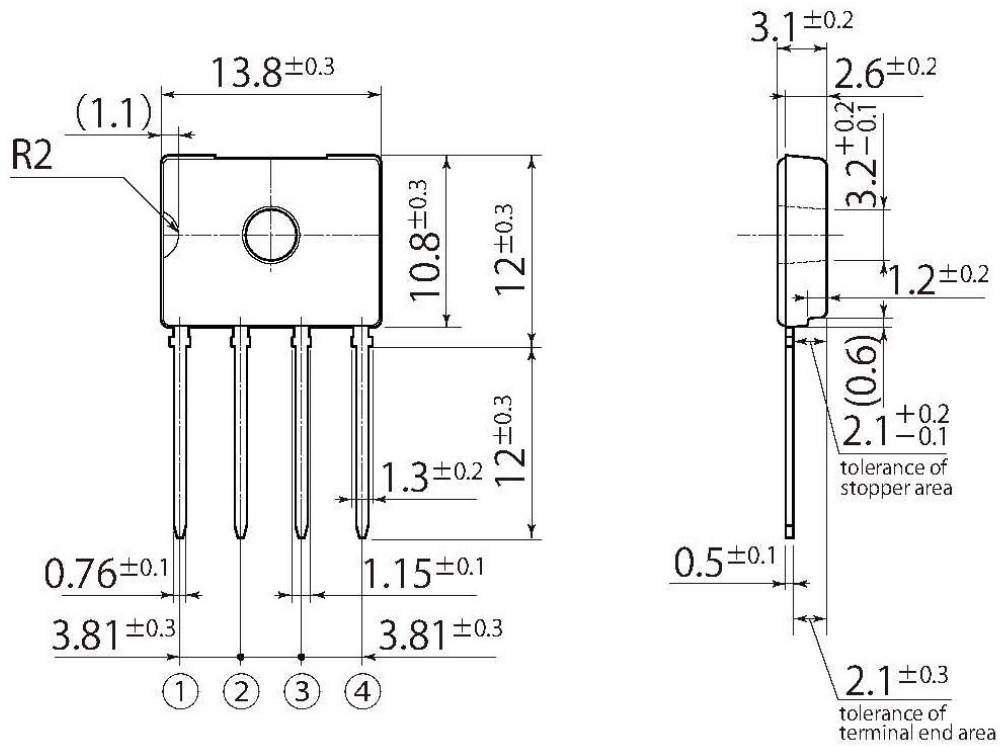


UD6KBA80 Peak Surge Forward Capability



D1

JEDEC Code	—
JEITA Code	—
House Name	D3K



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