

US15KB80R

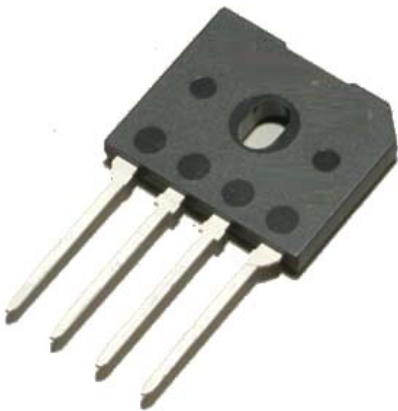
Bridge Diodes
800V, 15A

Feature

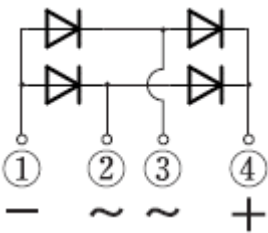
- Small・Compact SIP
- UL E142422
- Pb free terminal
- RoHS:Yes

OUTLINE

Package (House Name): D6K



Equivalent circuit



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

Item	Symbol	Conditions	Ratings	Unit
Storage temperrature	Tstg		-55 to 150	°C
Junction temperature	Tj		-55 to 150	°C
Repetitive peak reverse voltage	VRRM		800	V
Average forward current	IF(AV)	60Hz sine wave, Resistance load, With heatsink, Tc=101°C	15	A
Average forward current	IF(AV)	60Hz sine wave, Resistance load, On glass-epoxy substrate, Ta=30°C ※	2	A
Surge forward current	IFSM	60Hz sine wave, Non-repetitive 1 cycle peak value, Tj=25°C	200	A
Surge forward current	IFSM1	tp=3ms, sine wave, Non-repetitive, peak value, per diode, Tj=25°C	330	A
Current squared time	I²t	3ms≤tp<8.3ms, Tj=25°C, per diode	166	A²s
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

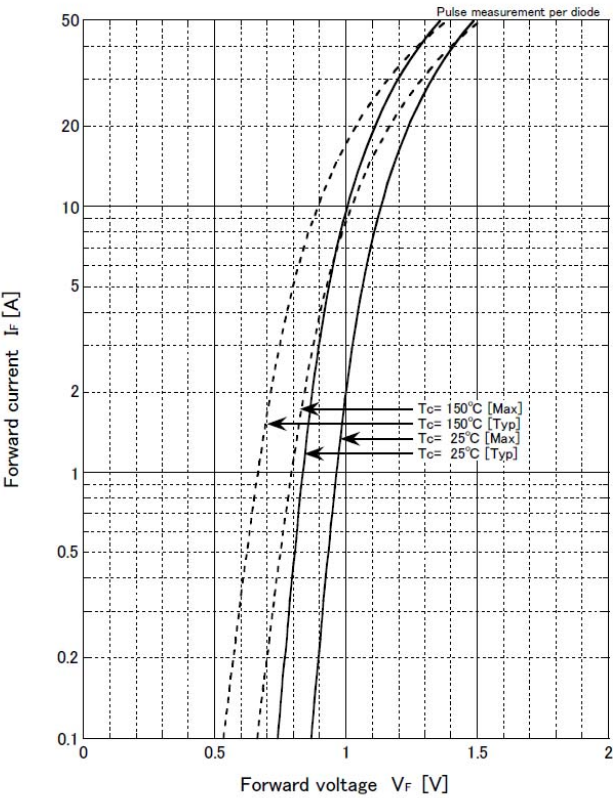
Electrical Characteristics (unless otherwise specified : Tc=25°C)

Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	V_F	$I_F=7.5A$, Pulse measurement, per diode			1.1	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, On glass-epoxy substrate ※			5	$^{\circ}C/W$
Thermal resistance	$R_{th(j-a)}$	Junction to ambient, On glass-epoxy substrate ※			35	$^{\circ}C/W$

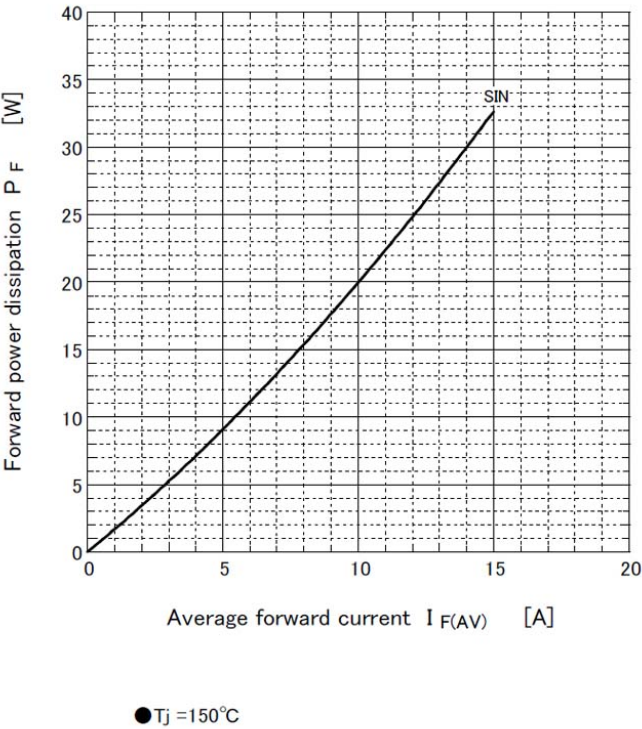
※ :See the original Specifications

CHARACTERISTIC DIAGRAMS

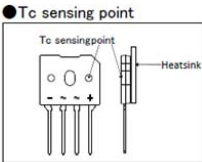
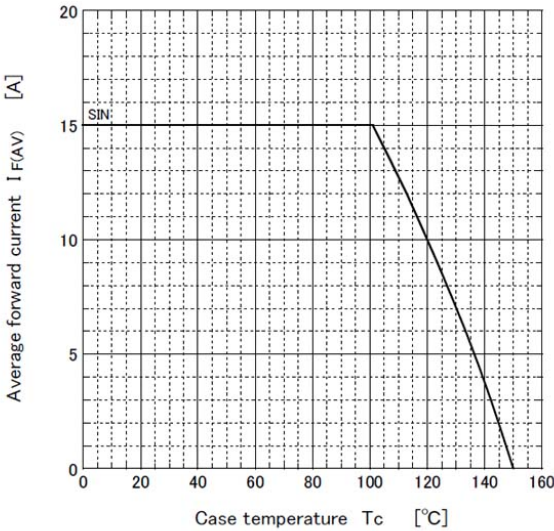
Forward voltage



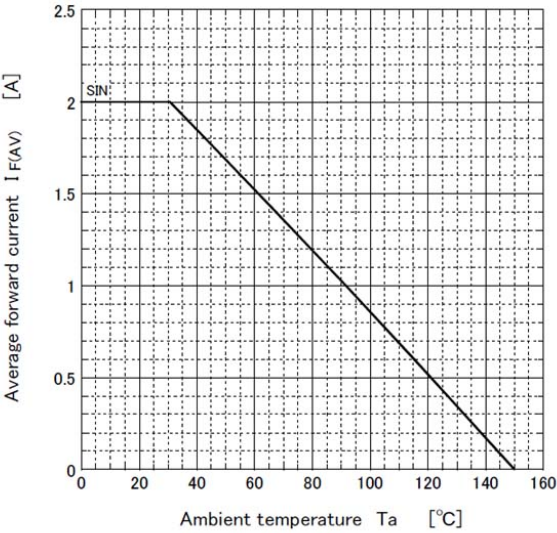
Forward power dissipation



Derating curve



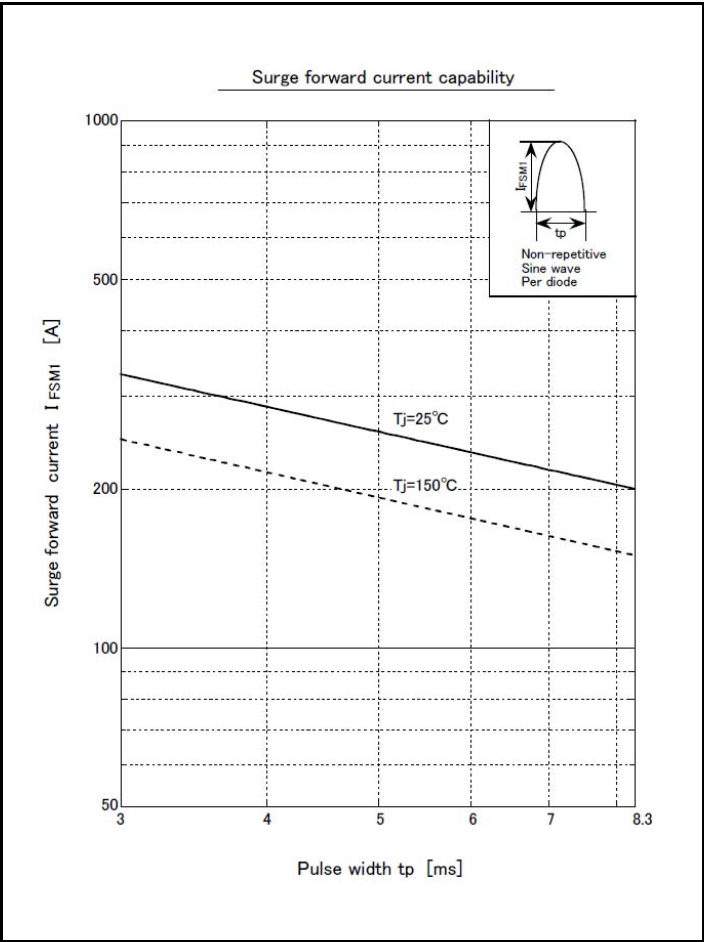
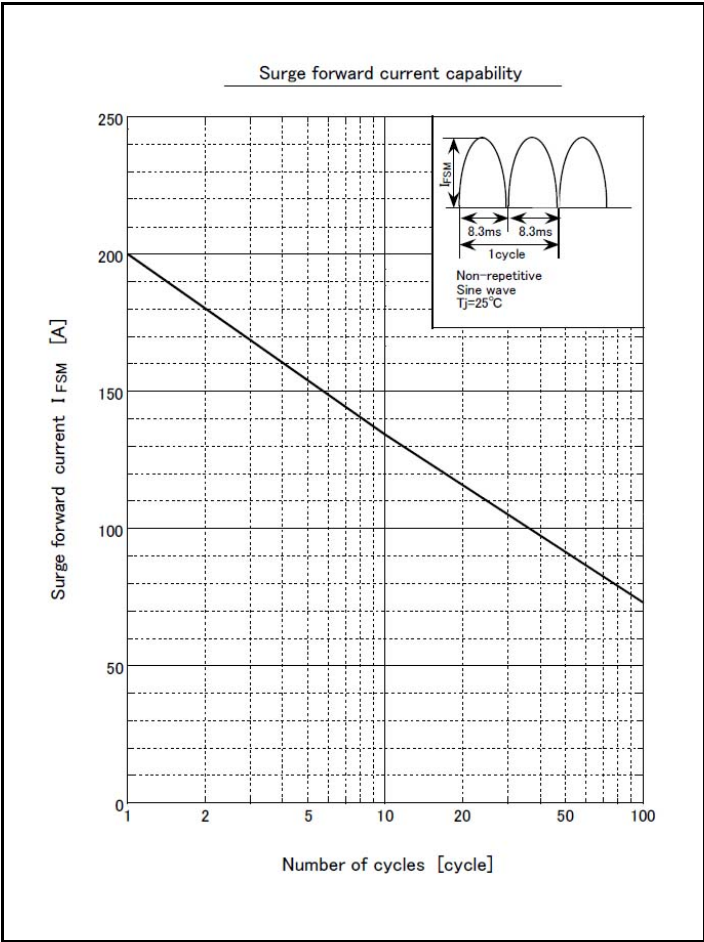
Derating curve



$V_R = 800\text{V}$
R-load
Free in air

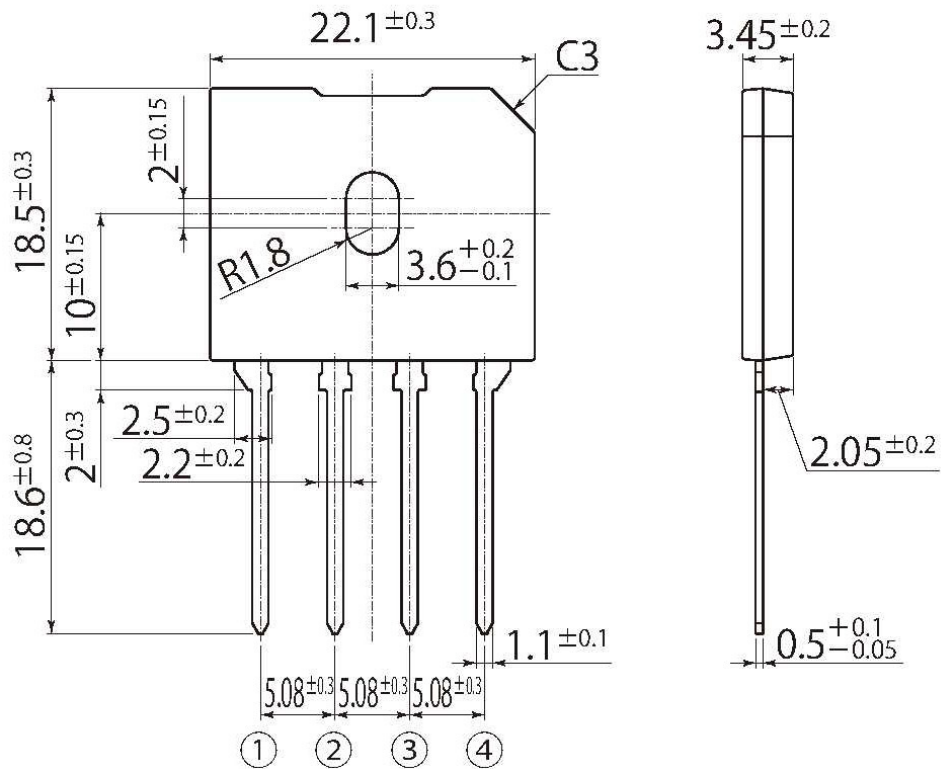
Substrate detail

Type	Glass-epoxy
Size	90mm X 150mm
Thickness	1mm
Conductor thickness	35 μm
Pattern area	160mm ²



D11

JEDEC Code	—
JEITA Code	—
House Name	D6K



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