

US20KB80R

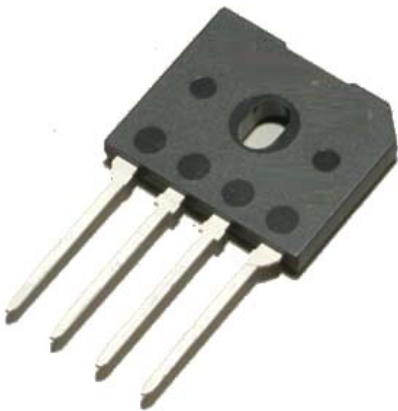
Bridge Diodes  
800V, 20A

Feature

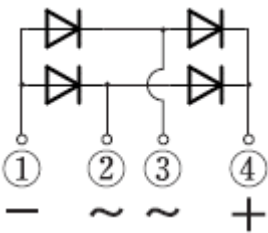
- Small・Compact SIP
- UL E142422
- Pb free terminal
- RoHS:Yes

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		150	°C
Repetitive peak reverse voltage	VRRM		800	V
Average forward current	IF(AV)	60Hz sine wave, Resistance load, With heatsink, Tc=97°C	20	A
Average forward current	IF(AV)	60Hz sine wave, Resistance load, Without heatsink, Ta=26°C	2.1	A
Surge forward current	IFSM	60Hz sine wave, Non-repetitive 1 cycle peak value, Tj=25°C	240	A
Surge forward current	IFSM1	tp=3ms, Tj=25°C, Non-repetitive	490	A
Current squared time	I <sup>2</sup> t	2ms≤tp<8.3ms, Tj=25°C, per diode	240	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

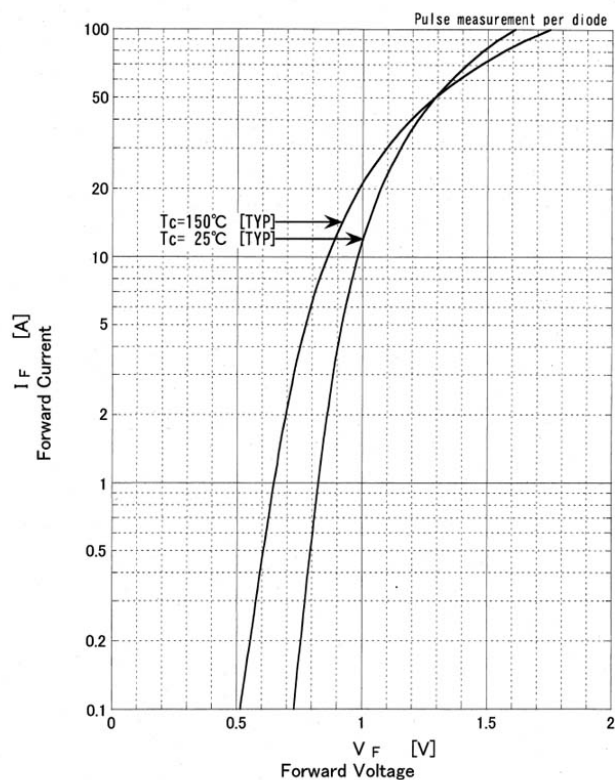
**Electrical Characteristics** (unless otherwise specified : Tc=25°C)

Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	$V_F$	IF=10A, Pulse measurement, per diode			1.1	V
Reverse current	$I_R$	VR=800V, Pulse measurement, per diode			10	μA
Thermal resistance	Rth(j-c)	Junction to case, With heatsink			1.2	°C/W
Thermal resistance	Rth(j-l)	Junction to lead, Without heatsink			5	°C/W
Thermal resistance	Rth(j-a)	Junction to ambient, Without heatsink			35	°C/W

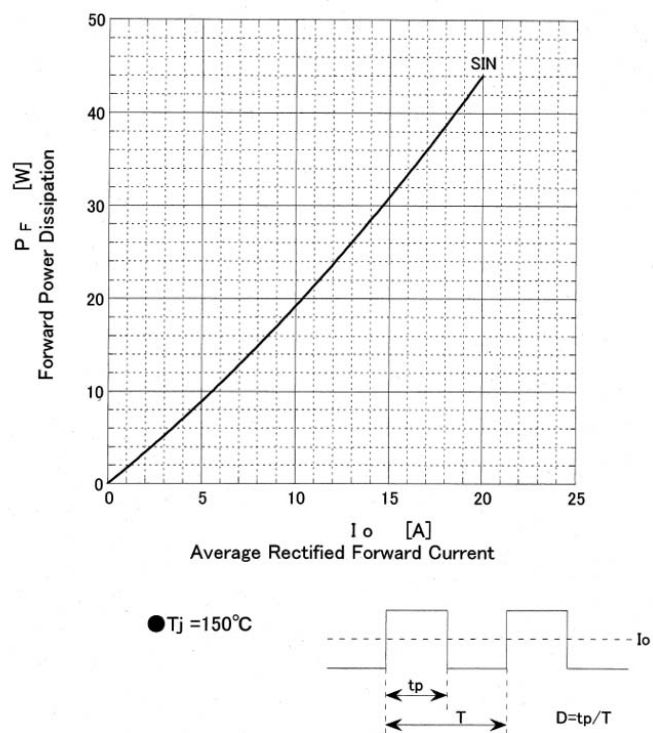
※ :See the original Specifications

## CHARACTERISTIC DIAGRAMS

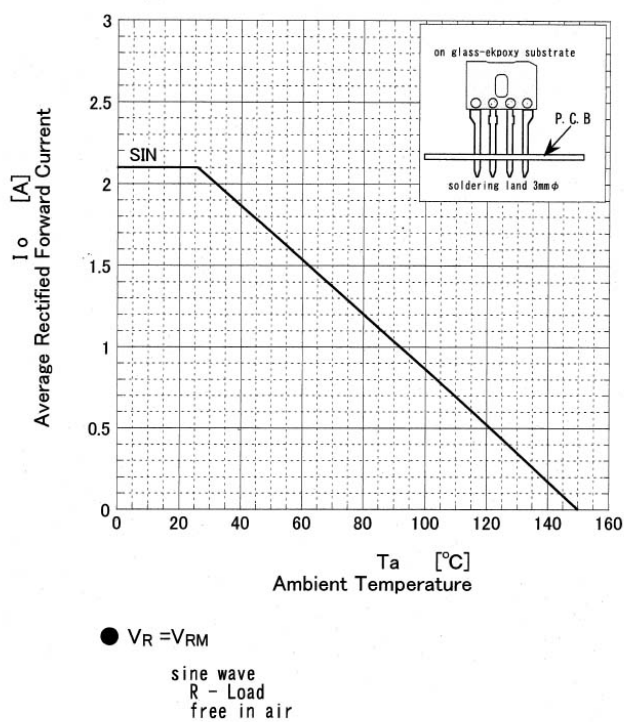
Forward Voltage



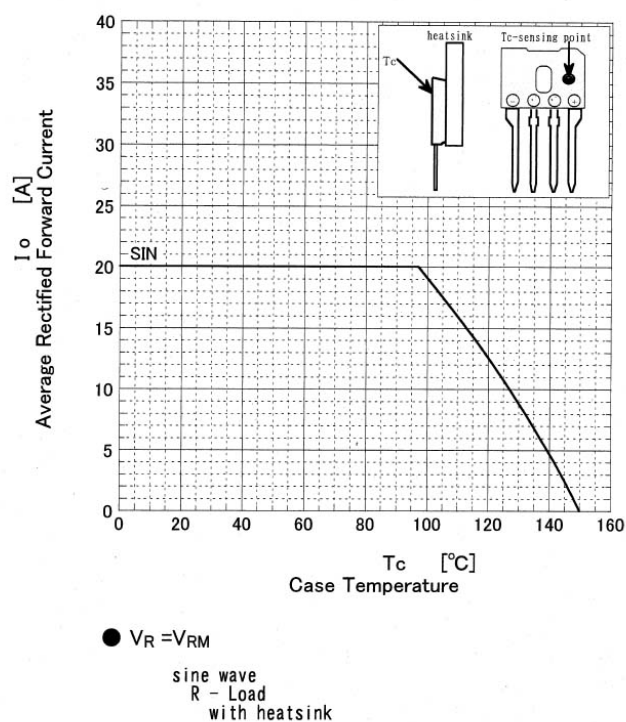
Forward Power Dissipation



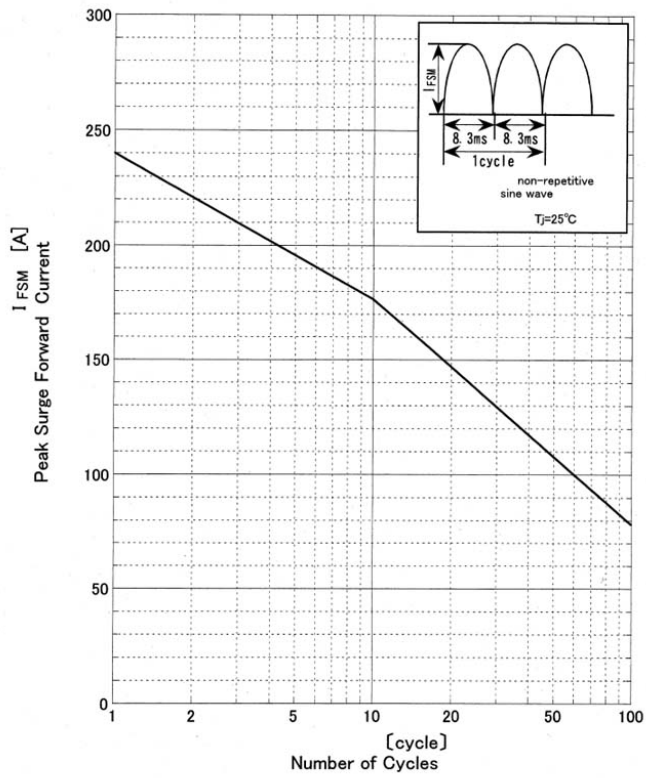
Derating Curve



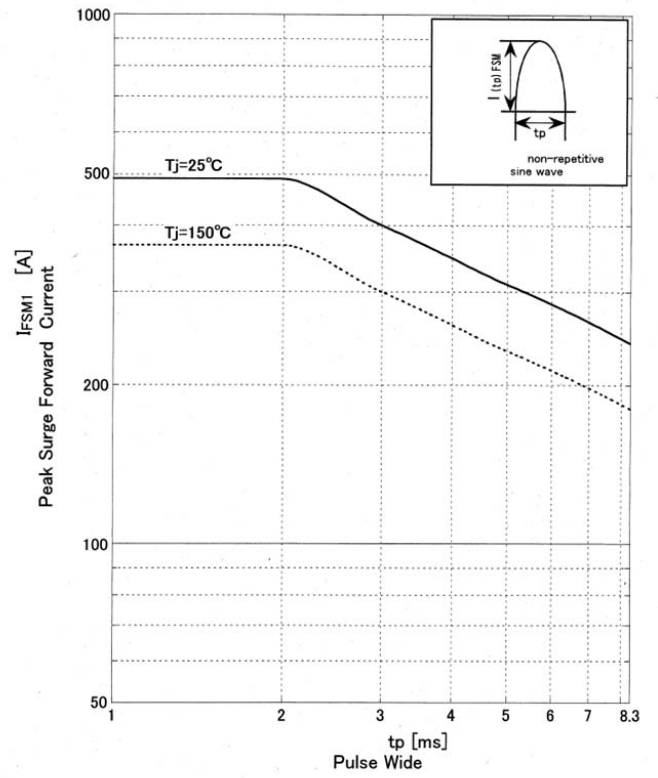
Derating Curve



Peak Surge Forward Capability



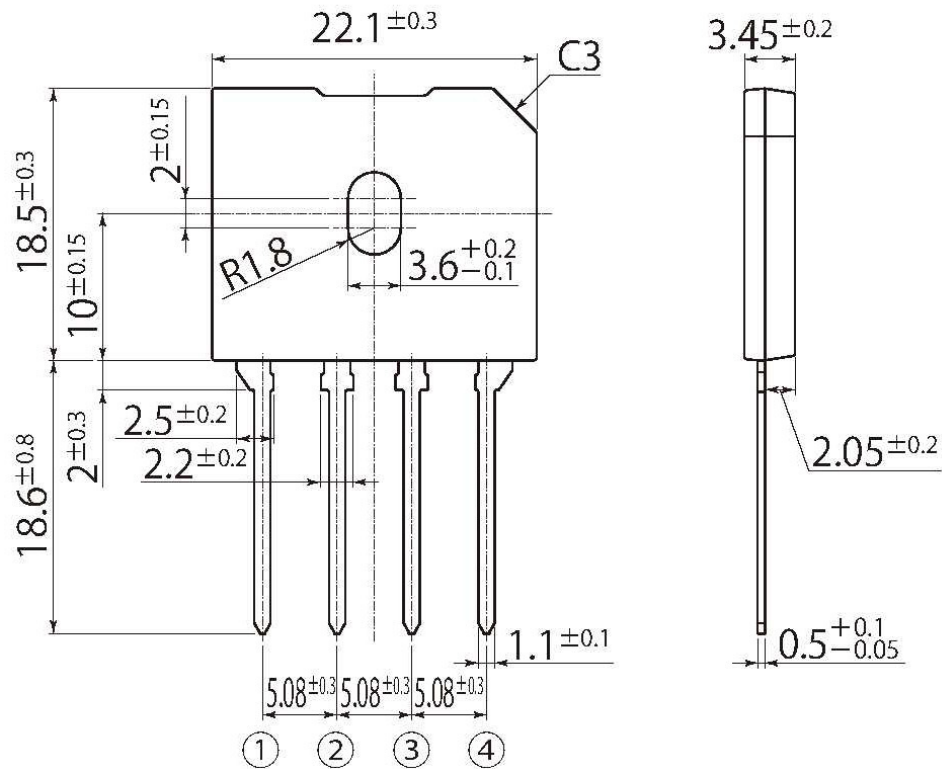
Peak Surge Forward Capability



unit:mm

D11

JEDEC Code	—
JEITA Code	—
House Name	D6K



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