

# D30JCB100K

## Bridge Diodes

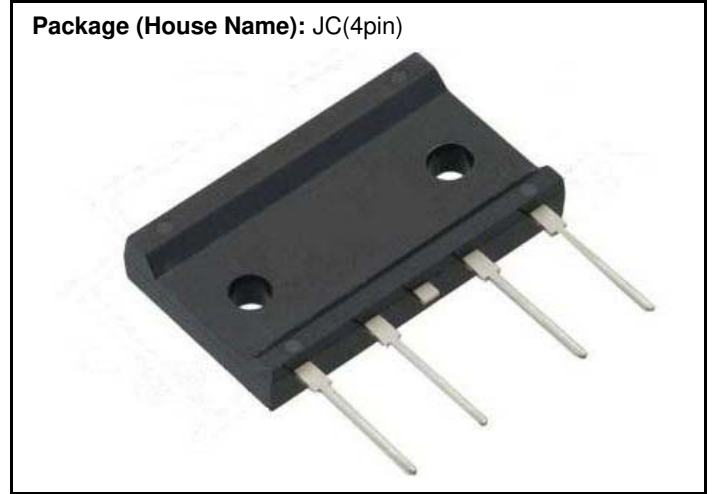
1000V, 30A

### Feature

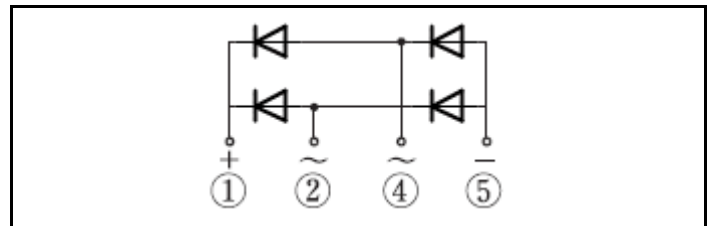
- High Speed FRD
- High Current
- High Voltage
- High Recovery Speed
- UL E142422
- Available for automotive use
- Pb free terminal
- RoHS:Yes

### OUTLINE

Package (House Name): JC(4pin)



### 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>		1000	V
Average forward current	I <sub>F(AV)</sub>	50Hz sine wave, Resistance load, With heatsink, T <sub>c</sub> =90°C	30	A
Surge forward current	I <sub>FSM</sub>	50Hz sine wave, Non-repetitive 1 cycle peak value, T <sub>j</sub> =25°C	450	A
Surge forward current	I <sub>FSM1</sub>	t <sub>p</sub> =1ms, T <sub>j</sub> =25°C, Non-repetitive	850	A
Dielectric strength	V <sub>dis</sub>	Terminals to case, AC 1 minute	2.5	kV
Mounting torque	TOR	(Recommended torque : 1.2N·m)	1.5	N·m

※ :See the original Specifications

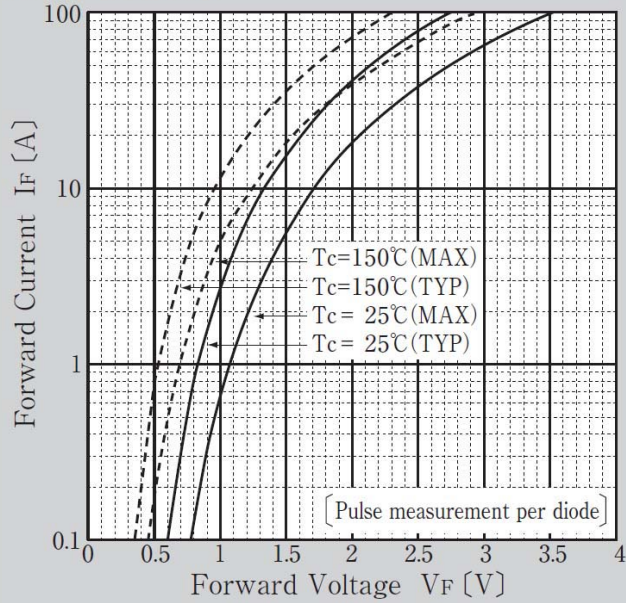
**Electrical Characteristics** (unless otherwise specified : Tc=25°C)

Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	$V_F$	IF=15A, Pulse measurement, per diode			1.9	V
Reverse current	$I_R$	VR=1000V, Pulse measurement, per diode			10	$\mu$ A
Total capacitance	Ct	f=1MHz, VR=10V, per diode		210		pF
Reverse recovery time	trr	IF=0.5A, IR=1.0A, 0.25IR, per diode			120	ns
Thermal resistance	Rth(j-c)	Junction to case, With heatsink			0.48	°C/W

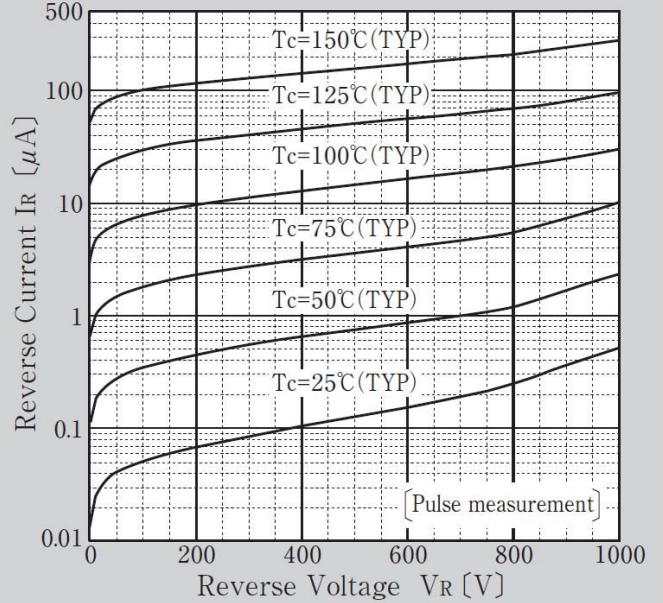
\* :See the original Specifications

# CHARACTERISTIC DIAGRAMS

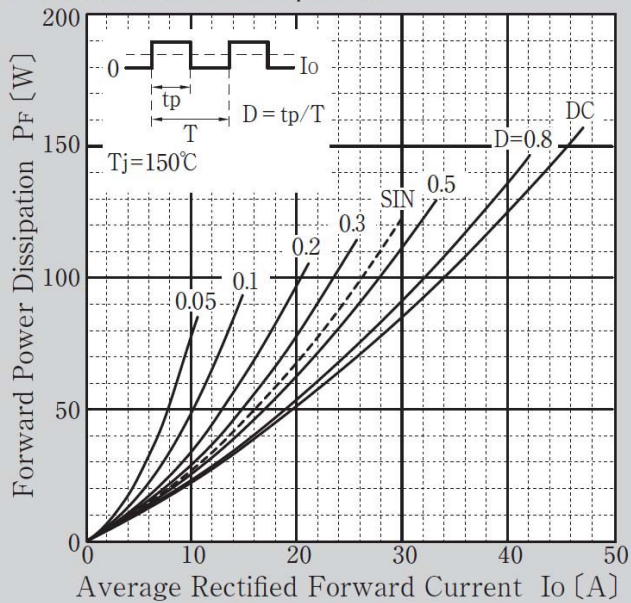
### Forward Voltage



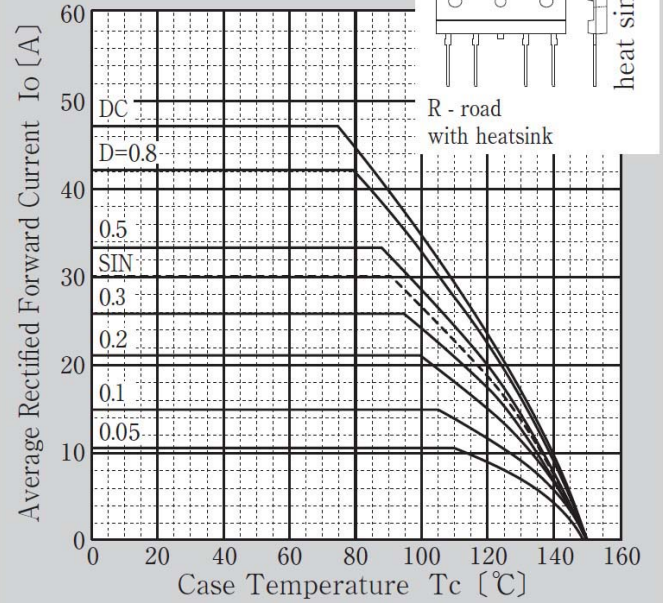
### Reverse Current



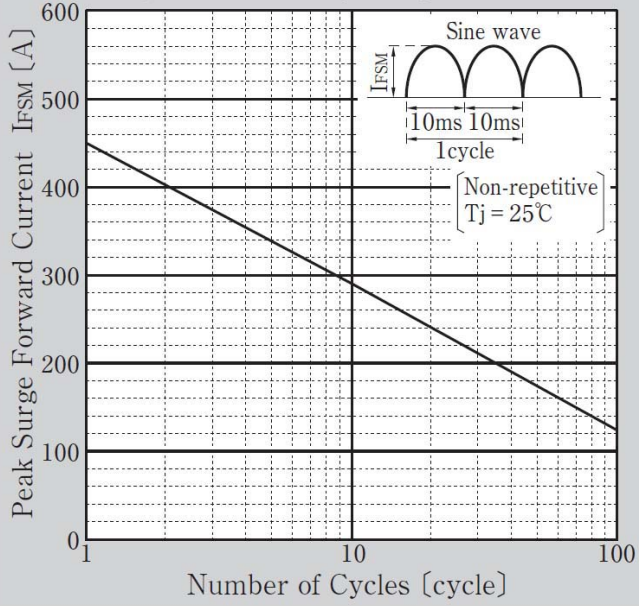
### Forward Power Dissipation



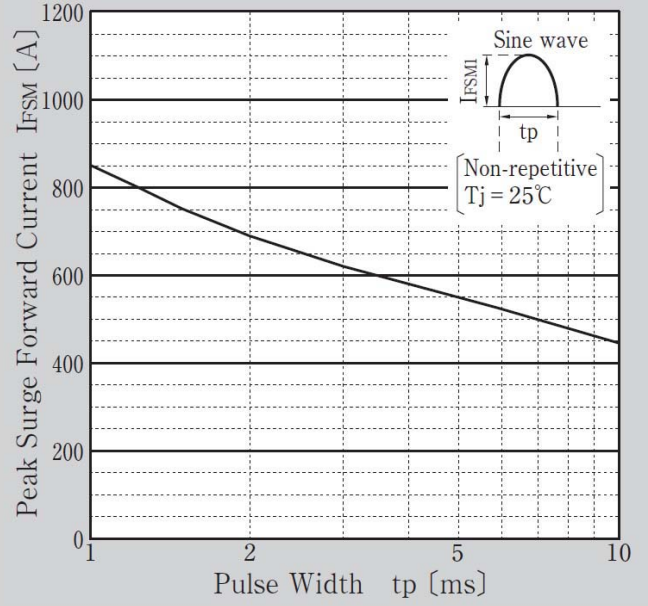
### Derating Curve



Peak Surge Forward Capability

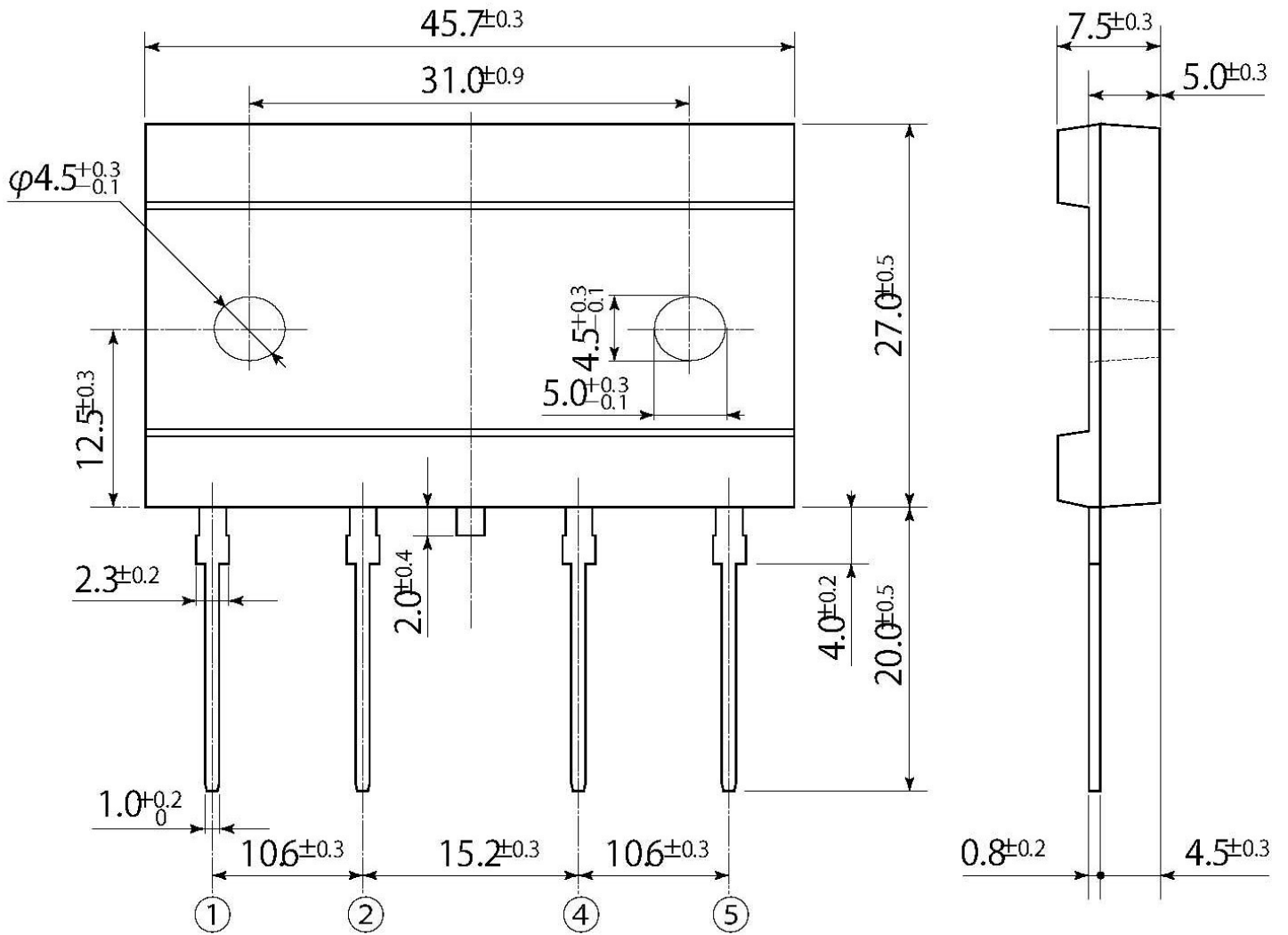


Peak Surge Forward Capability



D7

JEDEC Code	—
JEITA Code	—
House Name	TSB(4pin),JC(4pin)



## Notes

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