

# D30JCT120V

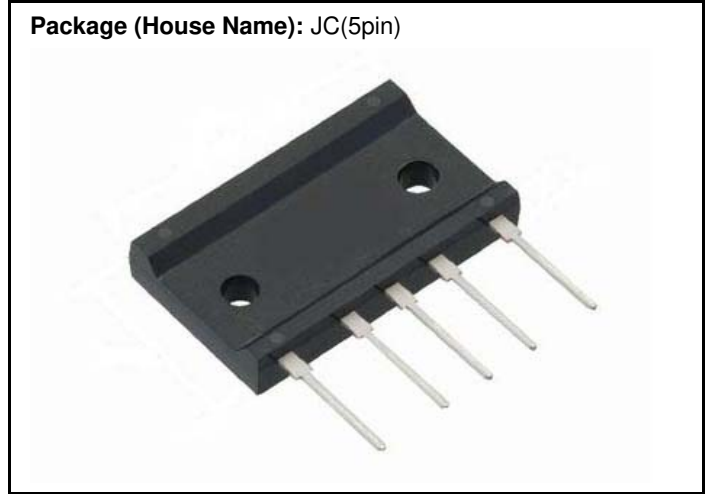
Bridge Diodes  
1200V, 30A

### Feature

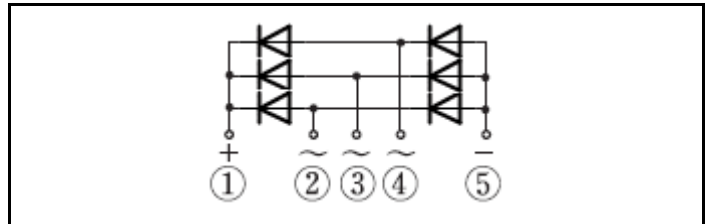
- Compact SIP
- UL E142422
- Pb free terminal
- RoHS:Yes

### OUTLINE

Package (House Name): JC(5pin)



### Equivalent circuit



### Absolute Maximum Ratings (unless otherwise specified : T<sub>c</sub>=25°C)

Item	Symbol	Conditions	Ratings	Unit
Storage temperature	T <sub>stg</sub>		-40 to 150	°C
Junction temperature	T <sub>j</sub>		150	°C
Repetitive peak reverse voltage	V <sub>RRM</sub>		1200	V
Average forward current	I <sub>F(AV)</sub>	50Hz sine wave, Resistance load, With heatsink, T <sub>c</sub> =116°C	30	A
Average forward current	I <sub>F(AV)</sub>	50Hz sine wave, Resistance load, Without heatsink, T <sub>a</sub> =25°C	4.5	A
Surge forward current	I <sub>FSM</sub>	50Hz sine wave, Non-repetitive 1 cycle peak value, per diode, T <sub>j</sub> =25°C	300	A
Surge forward current	I <sub>FSM1</sub>	t <sub>p</sub> =1ms, Non-repetitive, per diode, T <sub>j</sub> =25°C	945	A
Current squared time	I <sup>2</sup> t	1ms ≤ t < 10ms, per diode	450	A <sup>2</sup> s
Dielectric strength	V <sub>dis</sub>	Terminals to case, AC 1 minute, Except top (opposite side of the terminal side) of the mold case	2.5	kV
Mounting torque	TOR	(Recommended torque : 1.2N·m)	1.5	N·m

※ :See the original Specifications

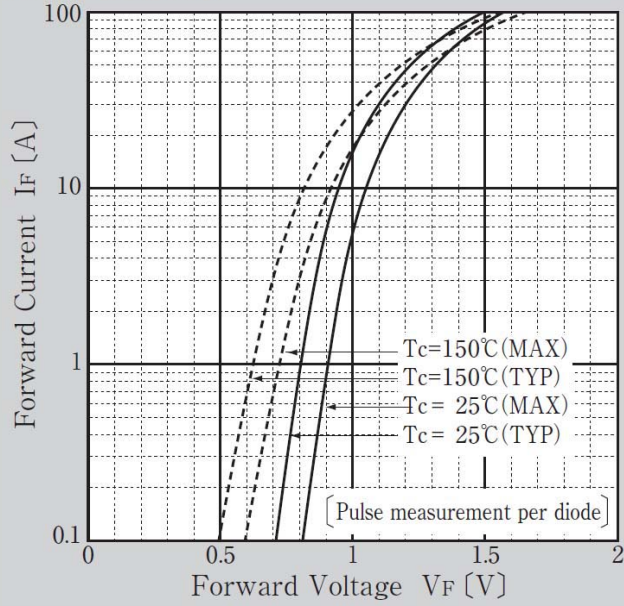
**Electrical Characteristics** (unless otherwise specified : Tc=25°C)

Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	V <sub>F</sub>	I <sub>F</sub> =10A, Pulse measurement, per diode			1.05	V
Reverse current	I <sub>R</sub>	V <sub>R</sub> =1200V, Pulse measurement, per diode			10	μA
Thermal resistance	R <sub>th(j-c)</sub>	Junction to case, With heatsink			0.5	°C/W
Thermal resistance	R <sub>th(j-a)</sub>	Junction to ambient, Without heatsink			16	°C/W

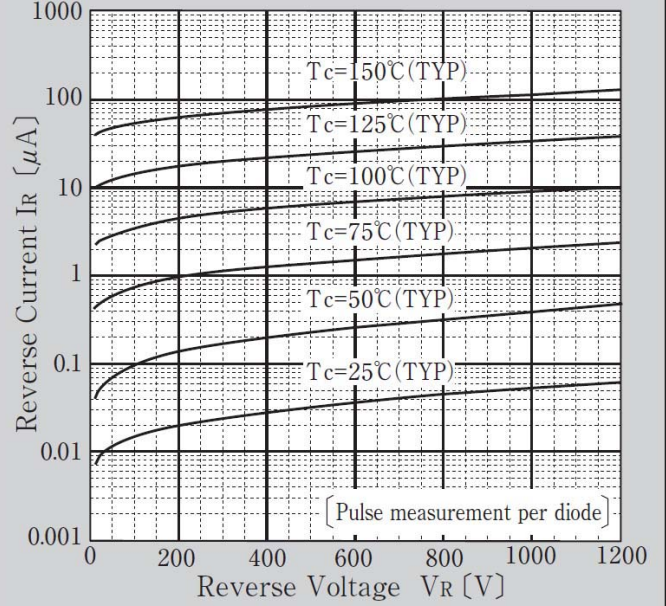
\* : See the original Specifications

# CHARACTERISTIC DIAGRAMS

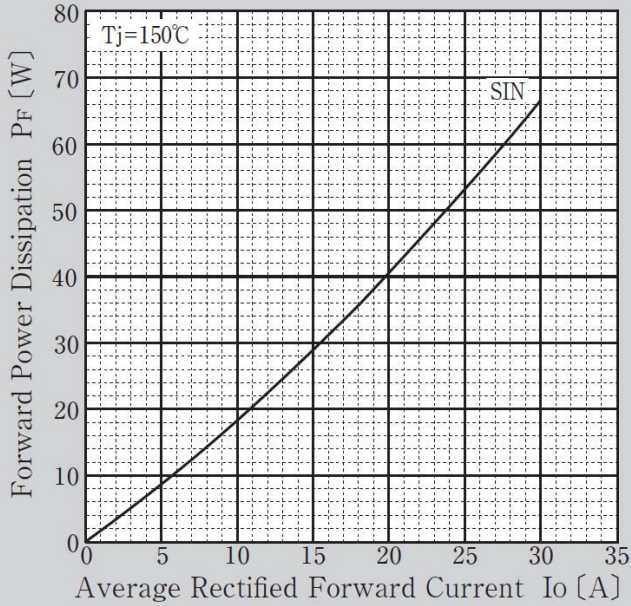
### Forward Voltage



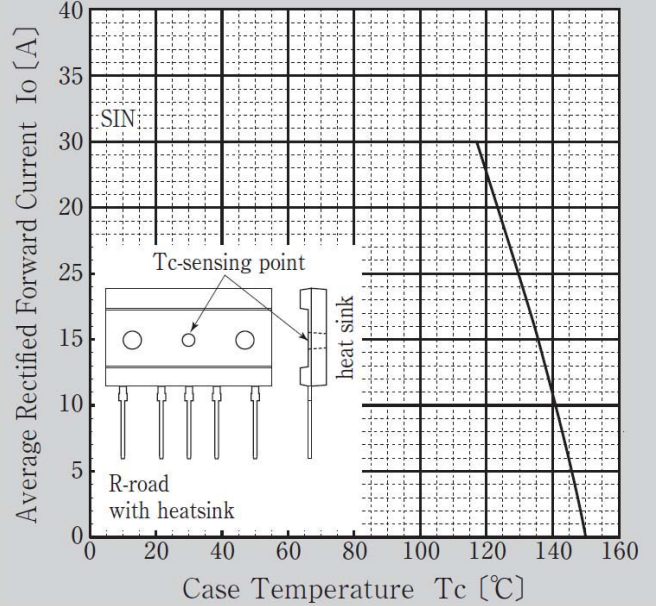
### Reverse Current



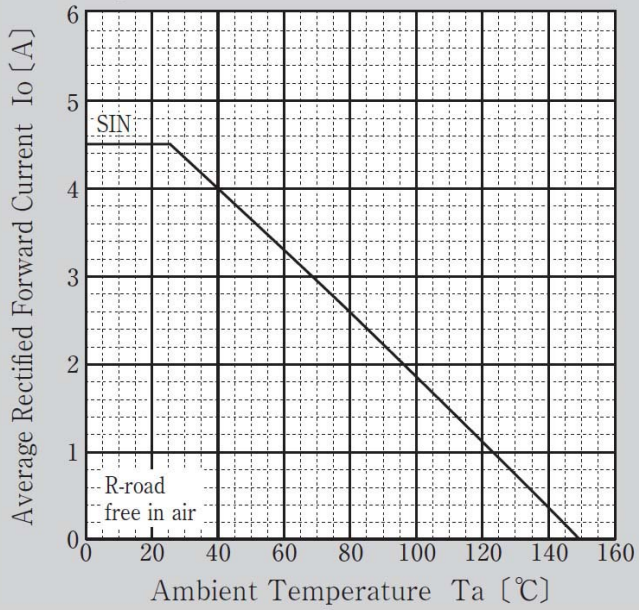
### Forward Power Dissipation



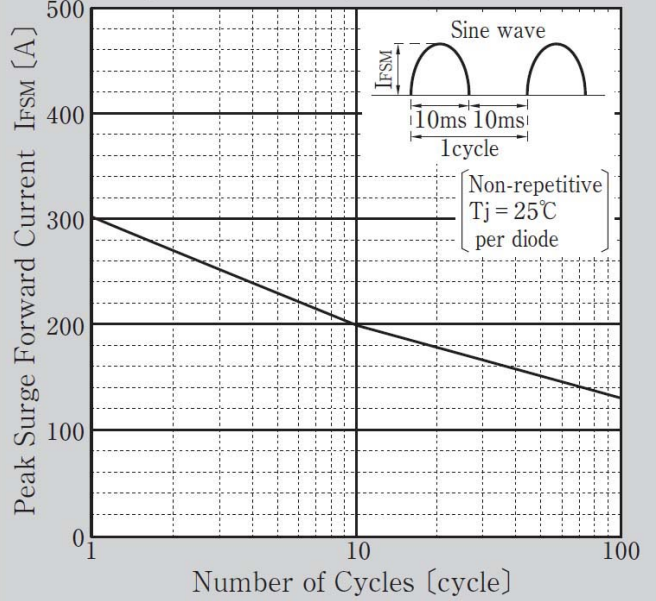
### Derating Curve



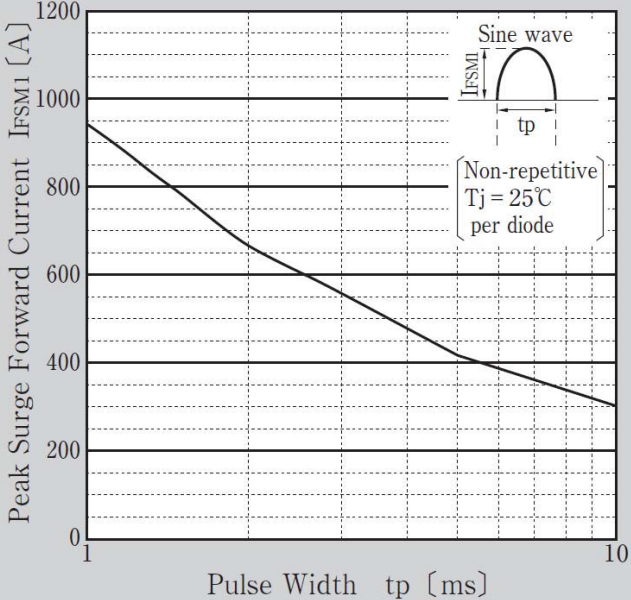
Derating Curve



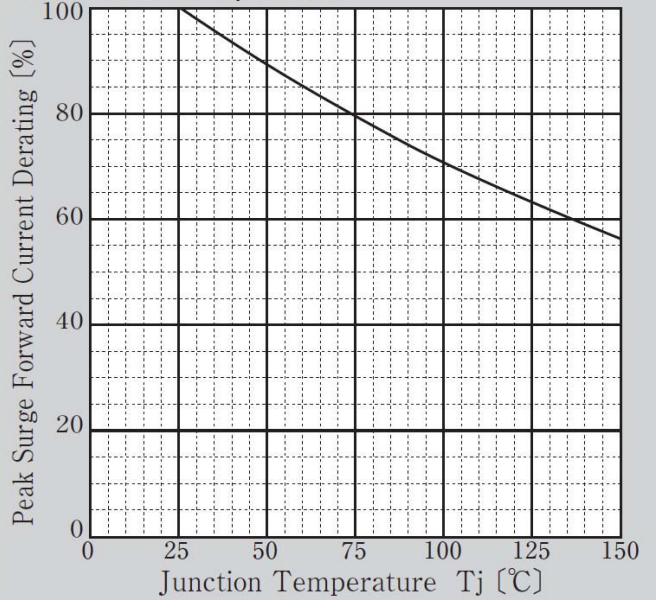
Peak Surge Forward Capability



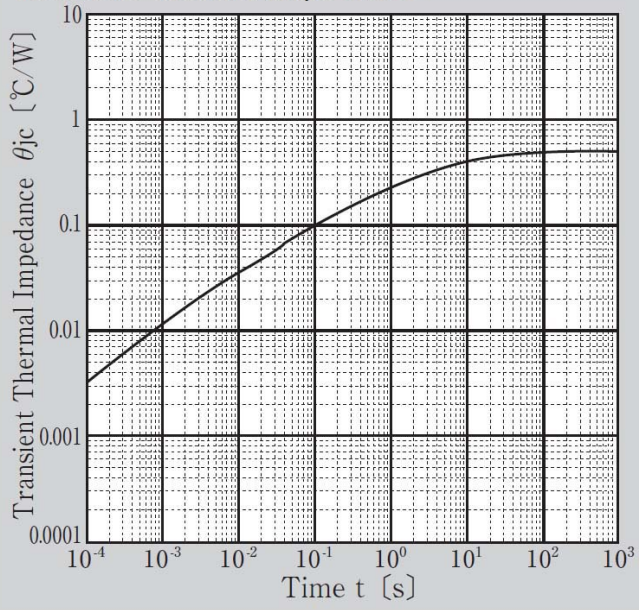
Peak Surge Forward Capability



Peak Surge Forward Current Derating vs Junction Temperature

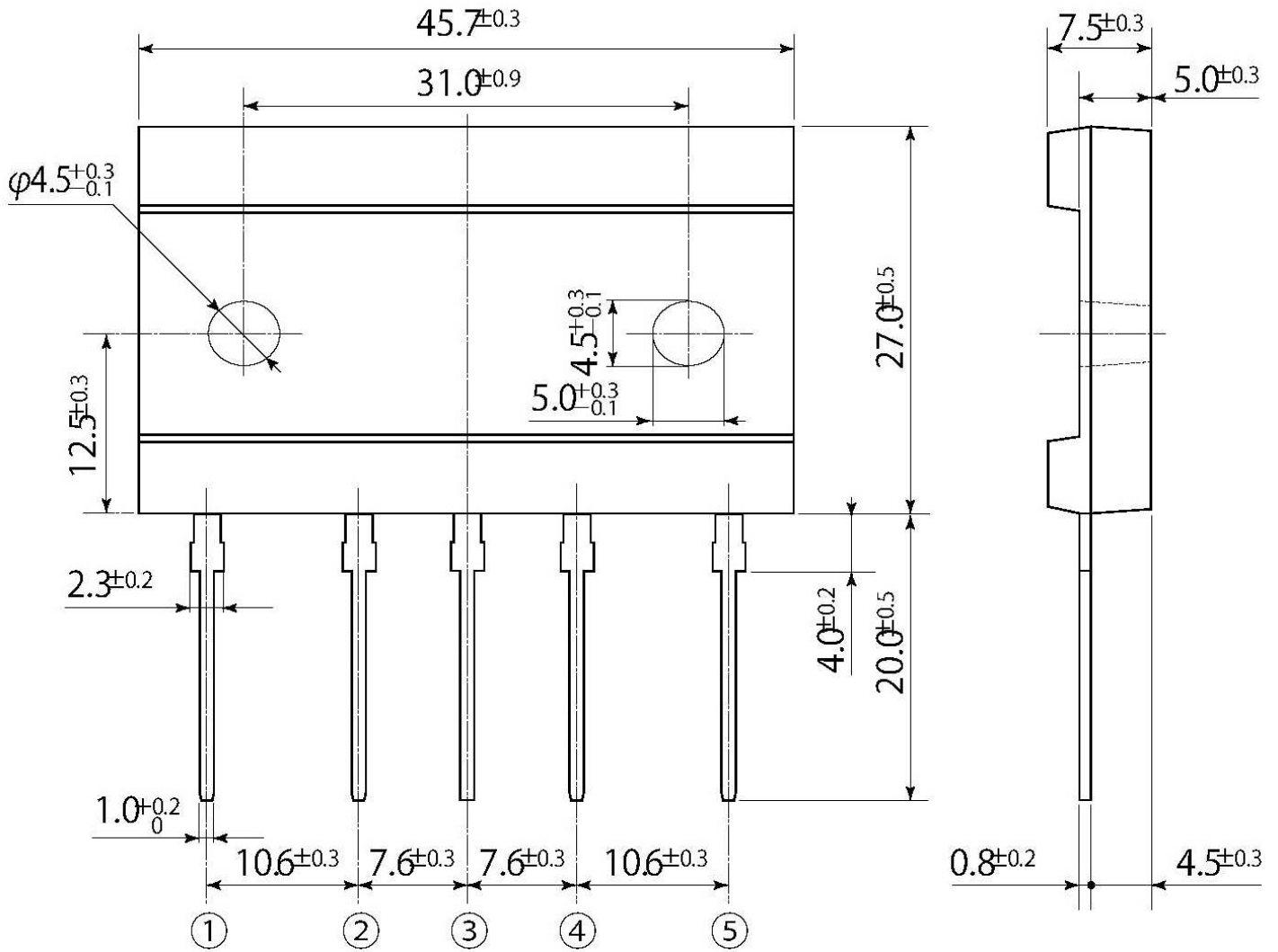


Transient Thermal Impedance



D8

JEDEC Code	-
JEITA Code	-
House Name	TSB(5pin),JC(5pin)



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