

# D50XB80

## Bridge Diodes

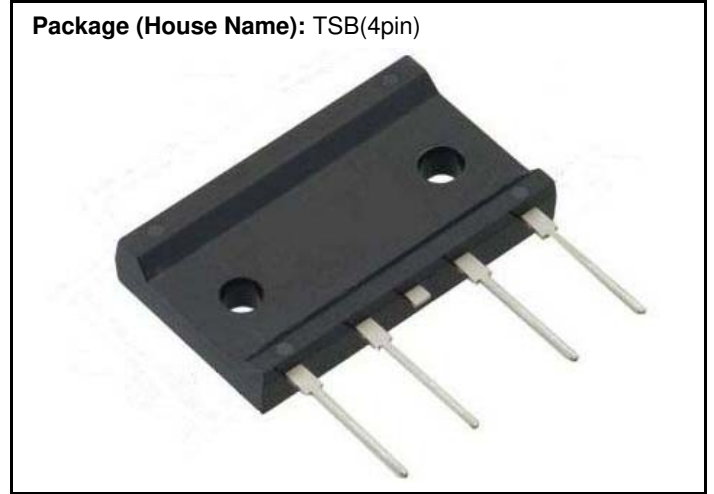
800V, 50A

### Feature

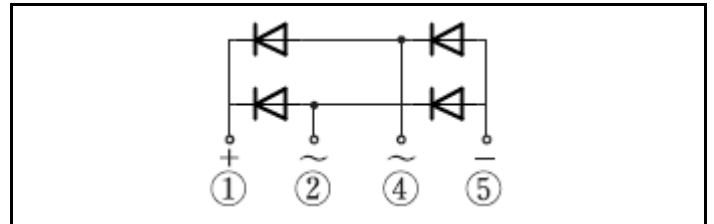
- Compact SIP
- UL E142422
- Pb free terminal
- RoHS:Yes

### OUTLINE

Package (House Name): TSB(4pin)



### Equivalent circuit



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

Item	Symbol	Conditions	Ratings	Unit
Storage temperature	T <sub>stg</sub>		-40 to 150	°C
Junction temperature	T <sub>j</sub>		-40 to 150	°C
Repetitive peak reverse voltage	V <sub>RRM</sub>		800	V
Average forward current	I <sub>F(AV)</sub>	50Hz sine wave, Resistance load, With heatsink, T <sub>c</sub> =95°C	50	A
Average forward current	I <sub>F(AV)</sub>	50Hz sine wave, Resistance load, On glass-epoxy substrate, T <sub>a</sub> =26°C ※	4.6	A
Surge forward current	I <sub>FSM</sub>	50Hz sine wave, Non-repetitive 1 cycle peak value, T <sub>j</sub> =25°C	600	A
Current squared time	I <sup>2</sup> t	1ms ≤ tp < 10ms, T <sub>j</sub> =25°C, per diode	1800	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	kV
Mounting torque	TOR	(Recommended torque : 1.2N·m)	1.5	N·m

※ : See the original Specifications

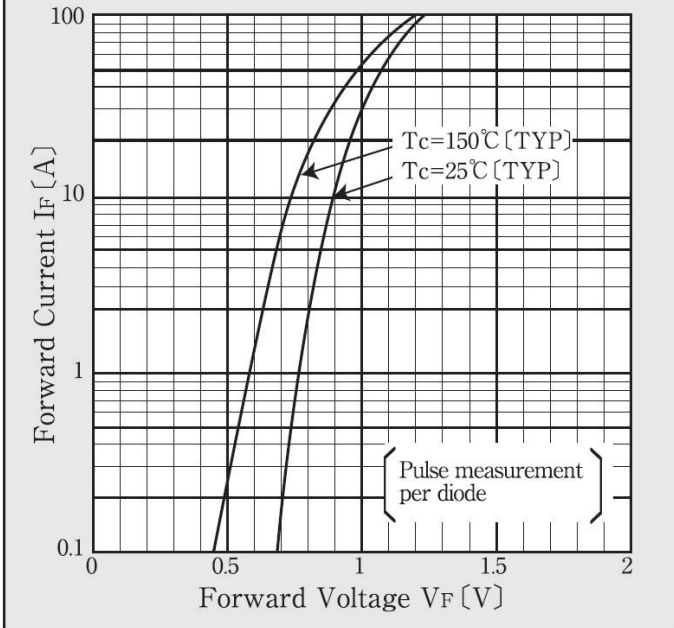
**Electrical Characteristics** (unless otherwise specified : Tc=25°C)

Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	V <sub>F</sub>	I <sub>F</sub> =25A, 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			0.5	°C/W
Thermal resistance	R <sub>th(j-a)</sub>	Junction to ambient, On glass-epoxy substrate ※			16	°C/W

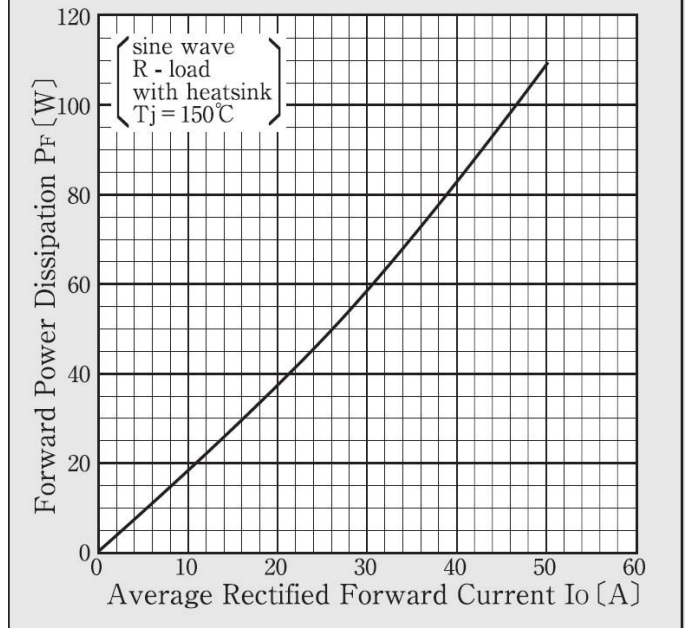
※ : See the original Specifications

# CHARACTERISTIC DIAGRAMS

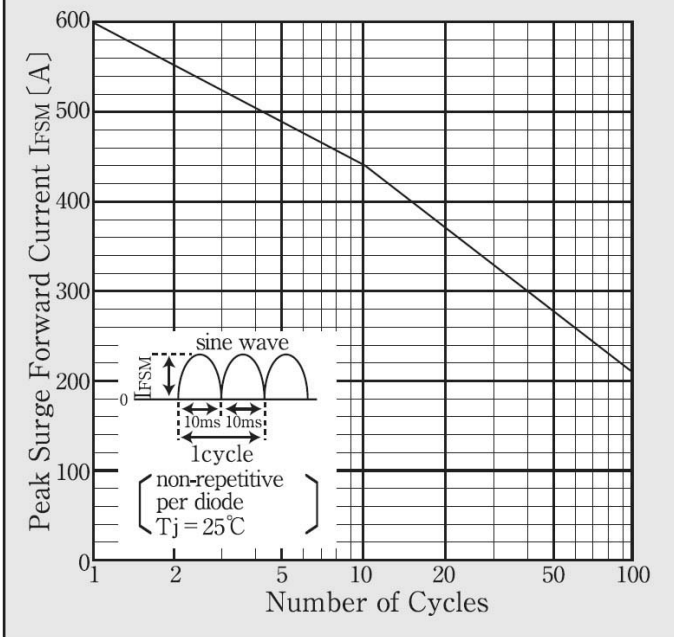
### Forward Voltage



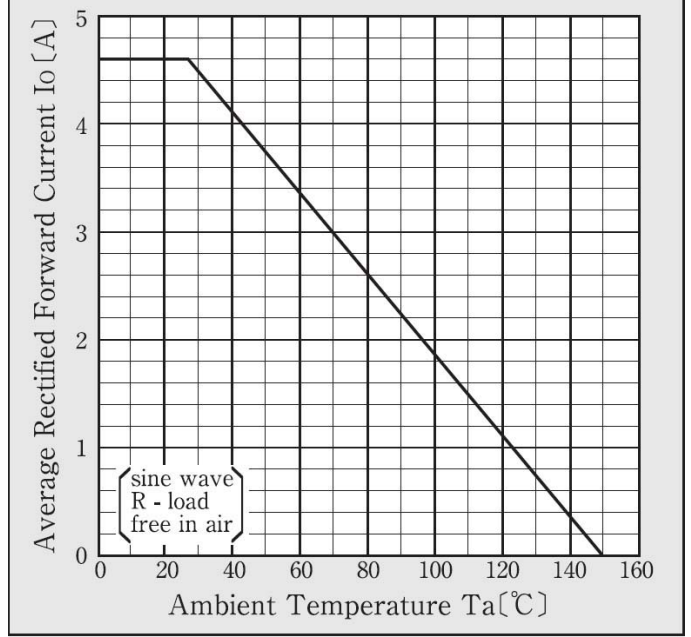
### Forward Power Dissipation



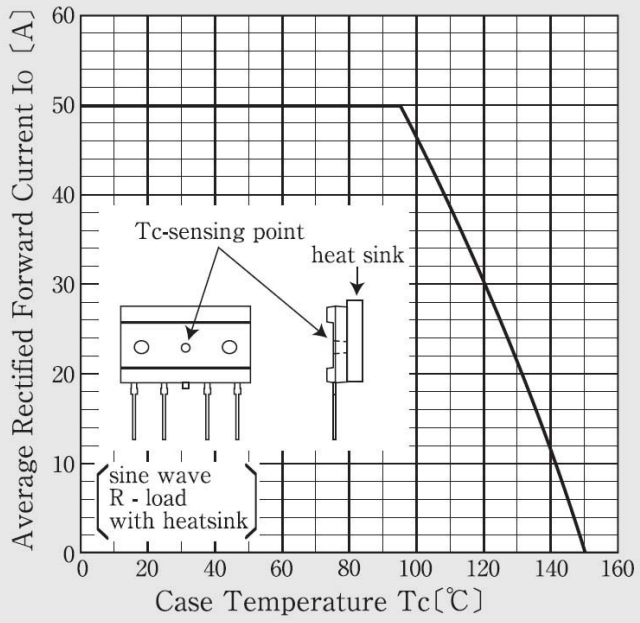
### Peak Surge Forward Current Capability



### Derating Curve

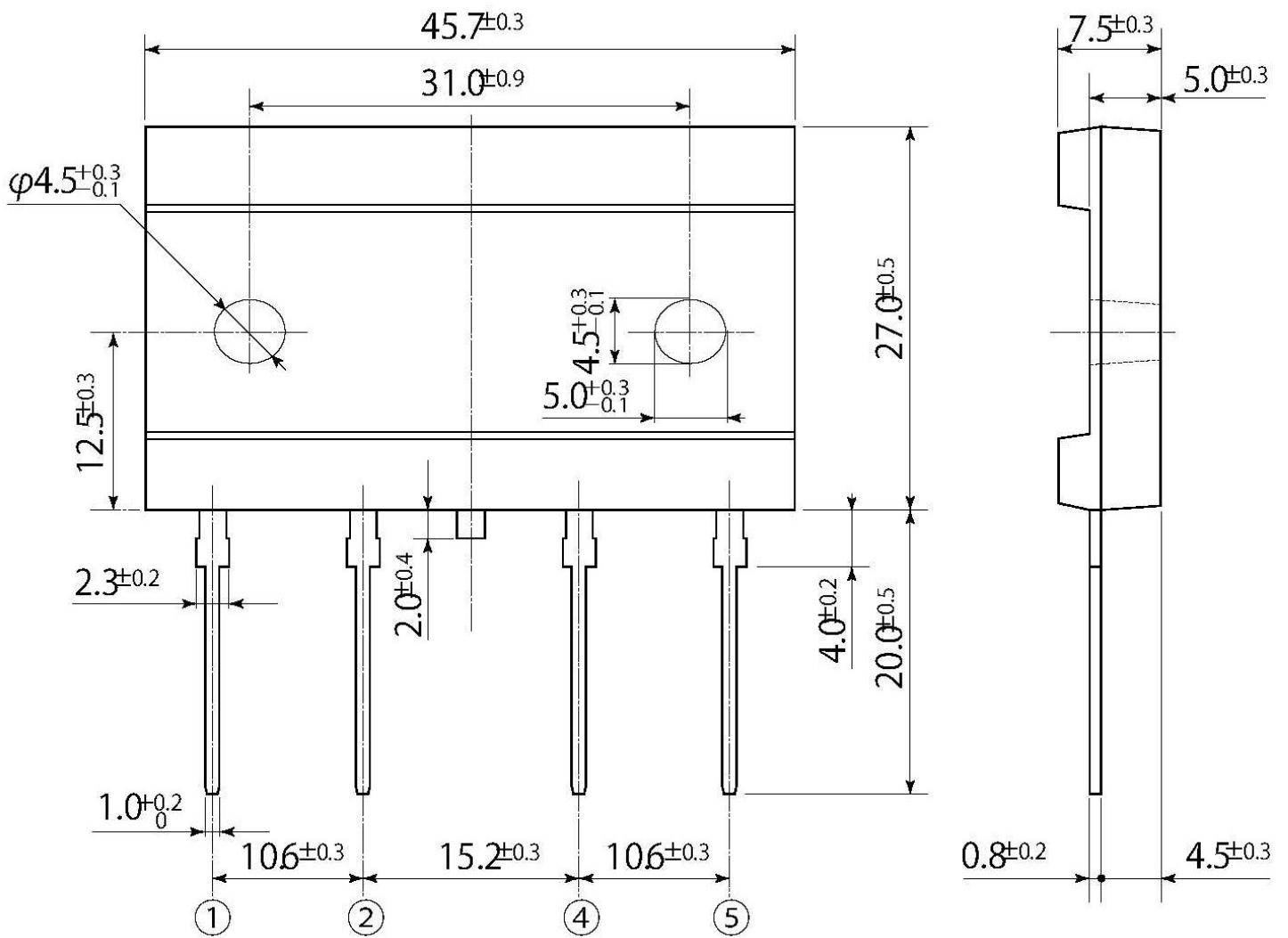


### Derating Curve



D7

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



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