

# S50VB80

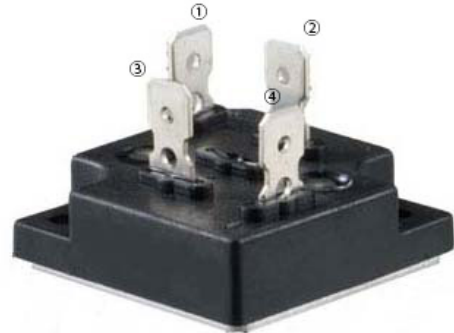
Bridge Diodes  
800V, 50A

## Feature

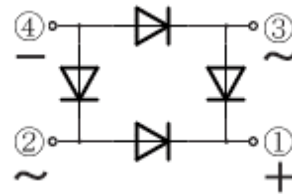
- Faston Terminal
- UL E142422
- Pb free terminal
- RoHS:Yes

## OUTLINE

Package (House Name): S50VB



## Equivalent circuit



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

Item	Symbol	Conditions	Ratings	Unit
Storage temperature	Tstg		-40 to 150	°C
Junction temperature	Tj		-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, Tc=95°C	50	A
Surge forward current	I <sub>FSM</sub>	50Hz sine wave, Non-repetitive 1 cycle peak value, Tj=25°C	500	A
Current squared time	I <sup>2</sup> t	1ms ≤ tp < 10ms, Tj=25°C, per diode	800	A <sup>2</sup> s
Dielectric strength	Vdis	Terminals to case, AC 1 minute	2	kV
Mounting torque	TOR	(Recommended torque : 0.6N·m)	0.8	N·m

※ : See the original Specifications

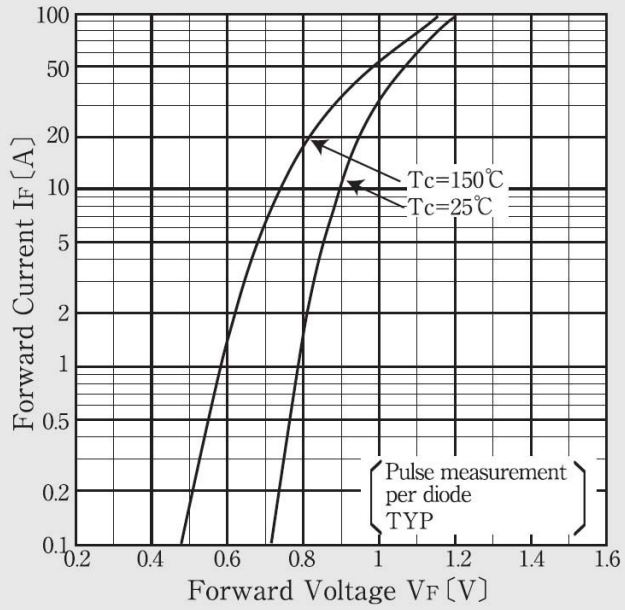
**Electrical Characteristics** (unless otherwise specified : Tc=25°C)

Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	V <sub>F</sub>	IF=25A, Pulse measurement, per diode			1.05	V
Reverse current	I <sub>R</sub>	VR=800V, Pulse measurement, per diode			10	μA
Thermal resistance	Rth(j-c)	Junction to case, With heatsink			0.5	°C/W

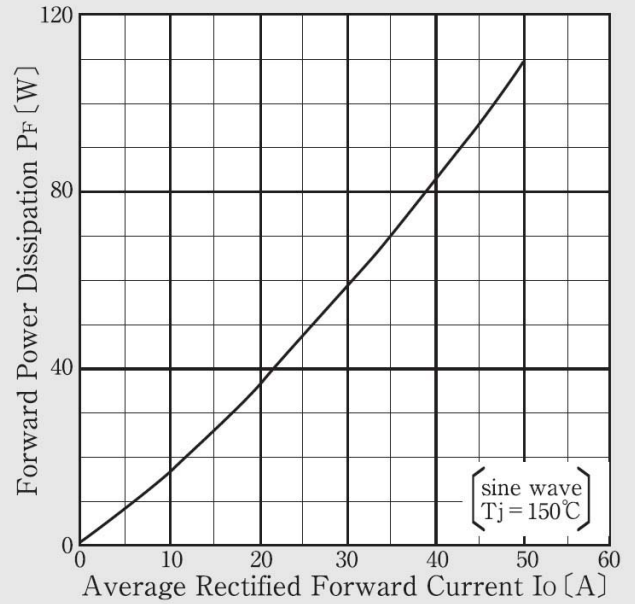
※ :See the original Specifications

# CHARACTERISTIC DIAGRAMS

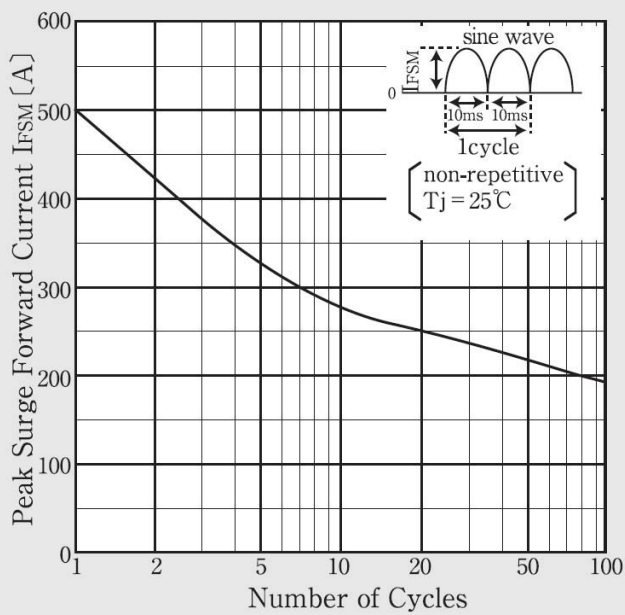
### Forward Voltage



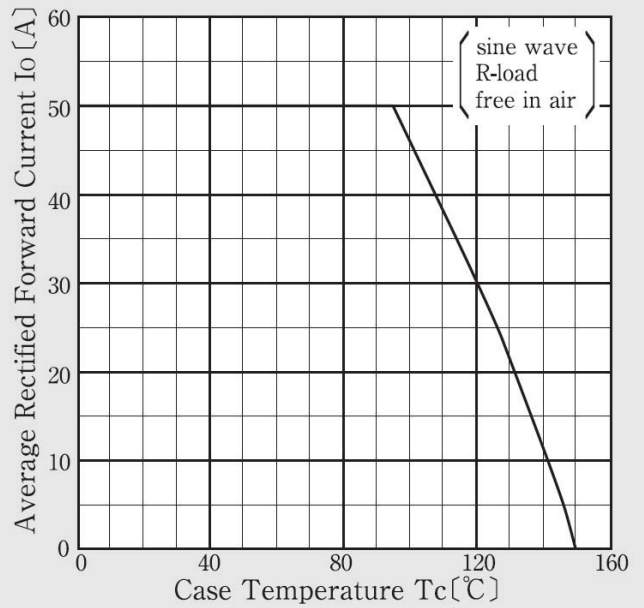
### Forward Power Dissipation



### Peak Surge Forward Current Capability



### Derating Curve





## Notes

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