

# D3SB80

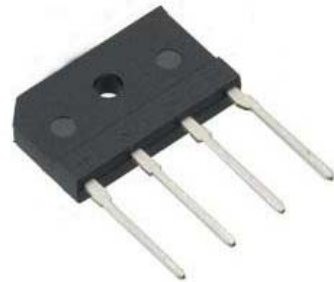
Bridge Diodes  
800V, 4A

**Feature**

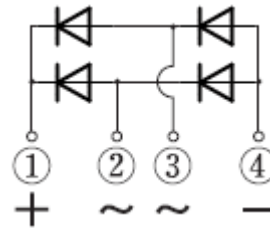
- Compact SIP
- UL E142422
- Pb free terminal
- RoHS:Yes

**OUTLINE**

Package (House Name): 3S



**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		150	°C
Repetitive peak reverse voltage	VRRM		800	V
Average forward current	I <sub>F(AV)</sub>	50Hz sine wave, Resistance load, With heatsink, Tc=108°C	4	A
Average forward current	I <sub>F(AV)</sub>	50Hz sine wave, Resistance load, Without heatsink, Ta=25°C	2.3	A
Surge forward current	I <sub>FSM</sub>	50Hz sine wave, Non-repetitive 1 cycle peak value, Tj=25°C	120	A
Current squared time	I <sup>2</sup> t	1ms ≤ t < 10ms, Tj=25°C, per diode	60	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

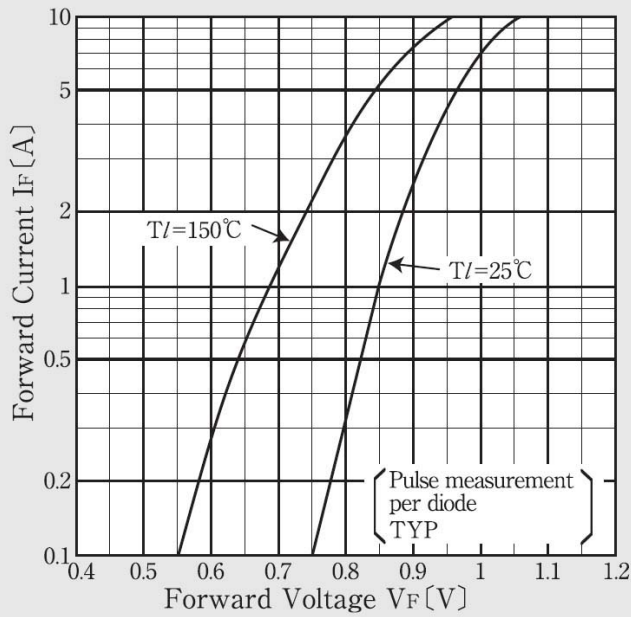
**Electrical Characteristics** (unless otherwise specified : Tc=25°C)

Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	V <sub>F</sub>	I <sub>F</sub> =2A, 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			5.5	°C/W
Thermal resistance	R <sub>th(j-l)</sub>	Junction to lead, Without heatsink			6	°C/W
Thermal resistance	R <sub>th(j-a)</sub>	Junction to ambient, Without heatsink			30	°C/W

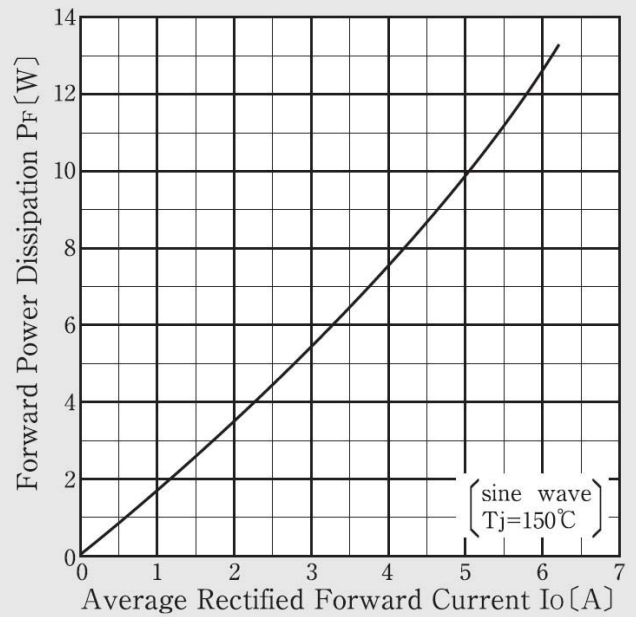
\* :See the original Specifications

# CHARACTERISTIC DIAGRAMS

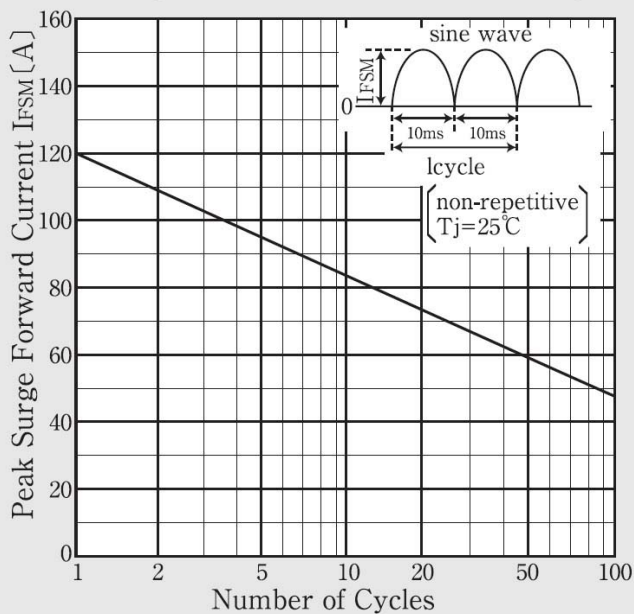
### Forward Voltage



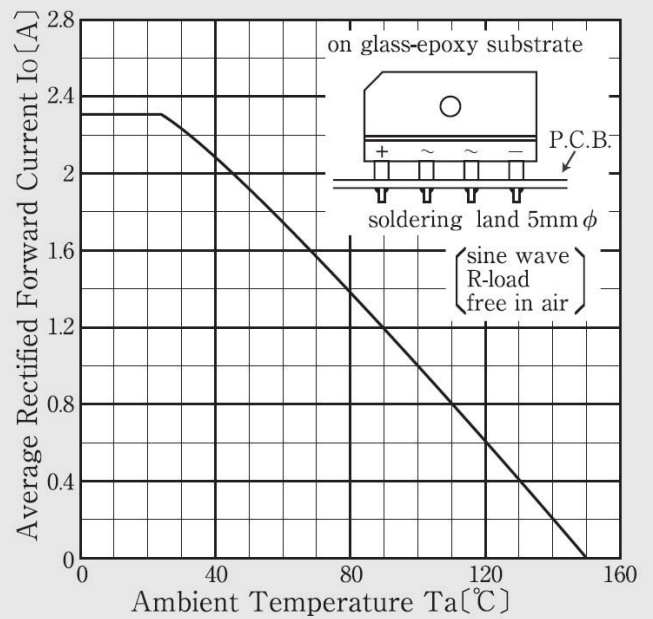
### Forward Power Dissipation



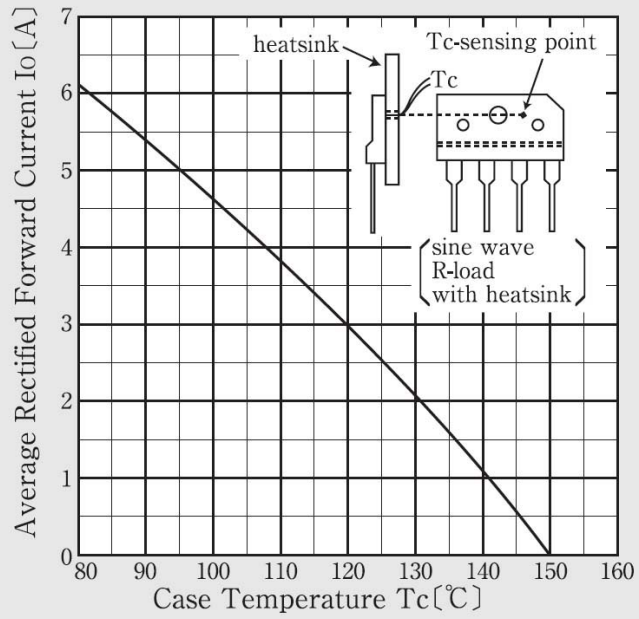
### Peak Surge Forward Current Capability



### Derating Curve

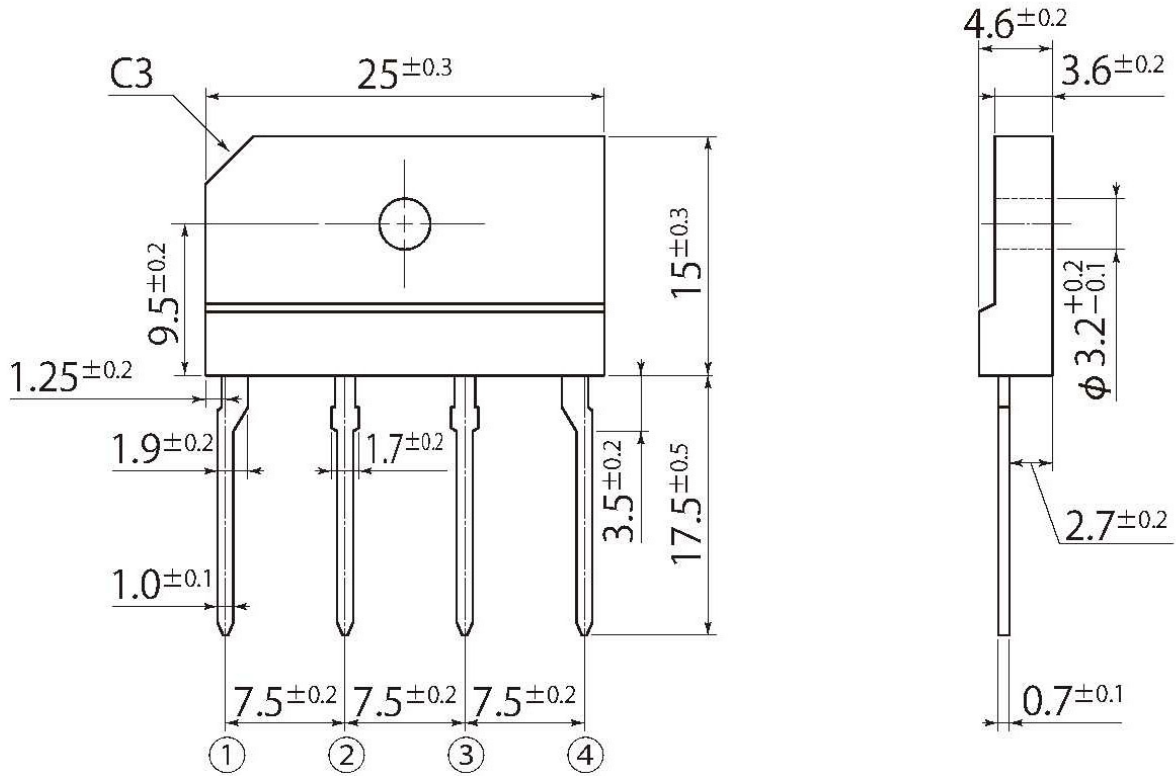


### Derating Curve



D3

JEDEC Code	—
JEITA Code	—
House Name	3S



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