

# D15XB80H

## Bridge Diodes

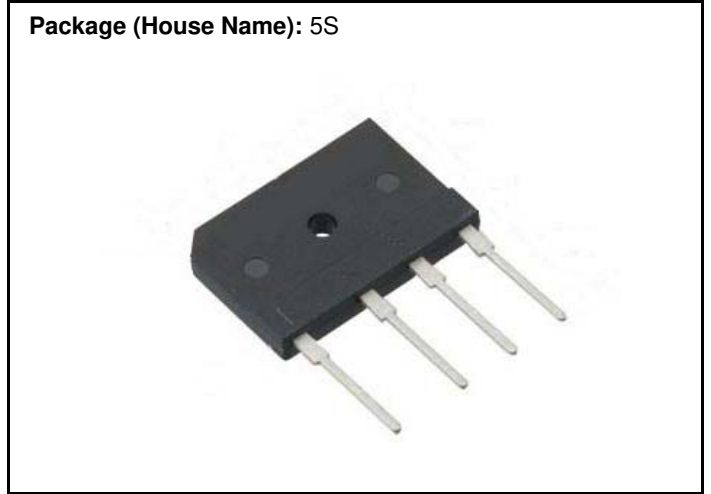
800V, 15A

### Feature

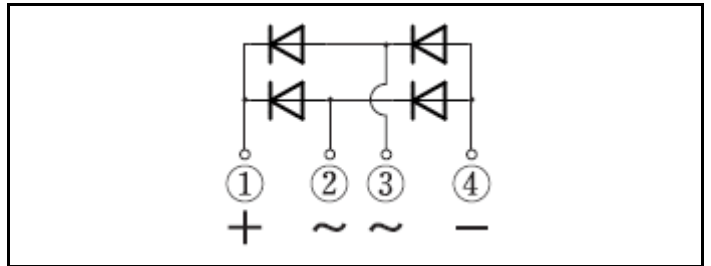
- Compact SIP
- UL E142422
- Pb free terminal
- RoHS:Yes

### OUTLINE

Package (House Name): 5S



### 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> =107°C	15	A
Average forward current	I <sub>F(AV)</sub>	50Hz sine wave, Resistance load, On glass-epoxy substrate, T <sub>a</sub> =25°C ※	3.5	A
Surge forward current	I <sub>FSM</sub>	50Hz sine wave, Non-repetitive 1 cycle peak value, T <sub>j</sub> =25°C	240	A
Current squared time	I <sup>2</sup> t	1ms ≤ tp < 10ms, T <sub>j</sub> =25°C, per diode	200	A <sup>2</sup> s
Dielectric strength	V <sub>dis</sub>	Terminals to case, AC 1 minute	2.5	kV
Mounting torque	TOR	(Recommended torque : 0.5N·m)	0.8	N·m

※ : See the original Specifications

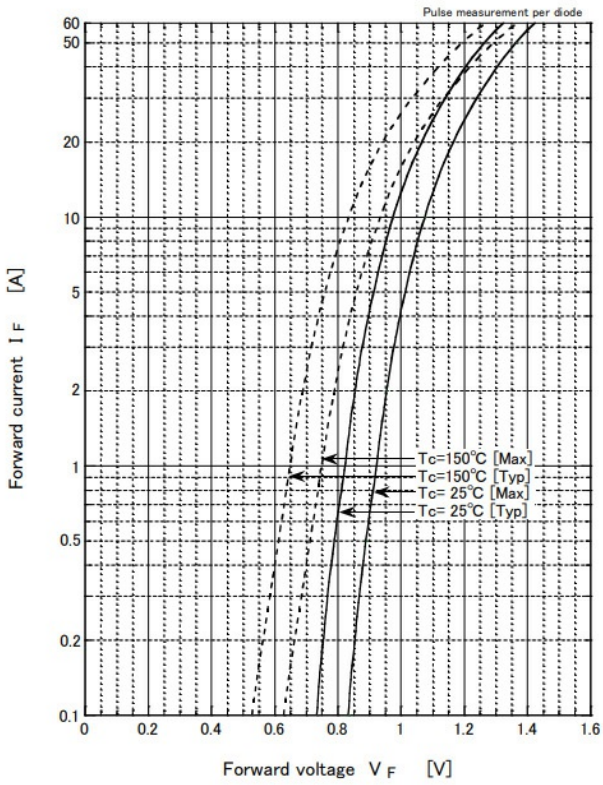
**Electrical Characteristics** (unless otherwise specified : Tc=25°C)

Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	$V_F$	$I_F=7.5A$ , Pulse measurement, per diode			1.05	V
Reverse current	$I_R$	$V_R=800V$ , Pulse measurement, per diode			10	$\mu A$
Thermal resistance	$R_{th(j-c)}$	Junction to case, With heatsink			1.5	$^{\circ}C/W$
Thermal resistance	$R_{th(j-l)}$	Junction to lead, On glass-epoxy substrate *			5	$^{\circ}C/W$
Thermal resistance	$R_{th(j-a)}$	Junction to ambient, On glass-epoxy substrate *			22	$^{\circ}C/W$

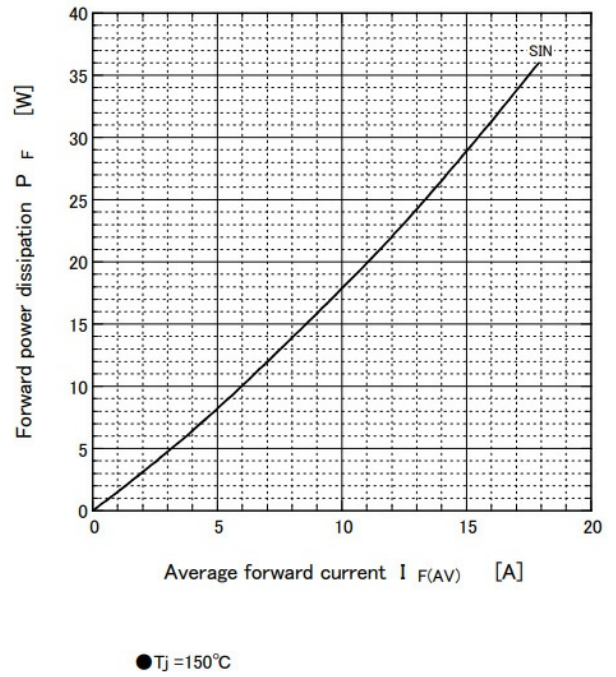
\* :See the original Specifications

# CHARACTERISTIC DIAGRAMS

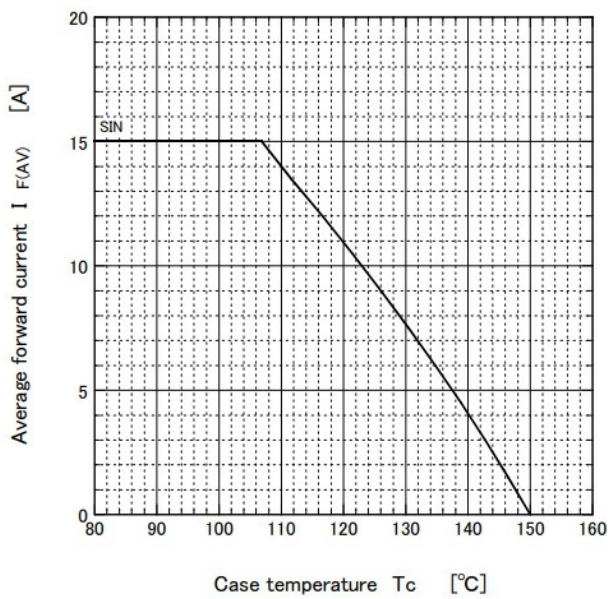
Forward voltage



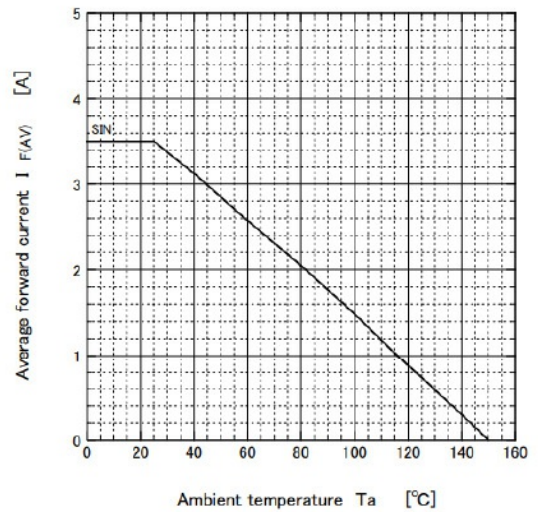
Forward power dissipation



Derating curve

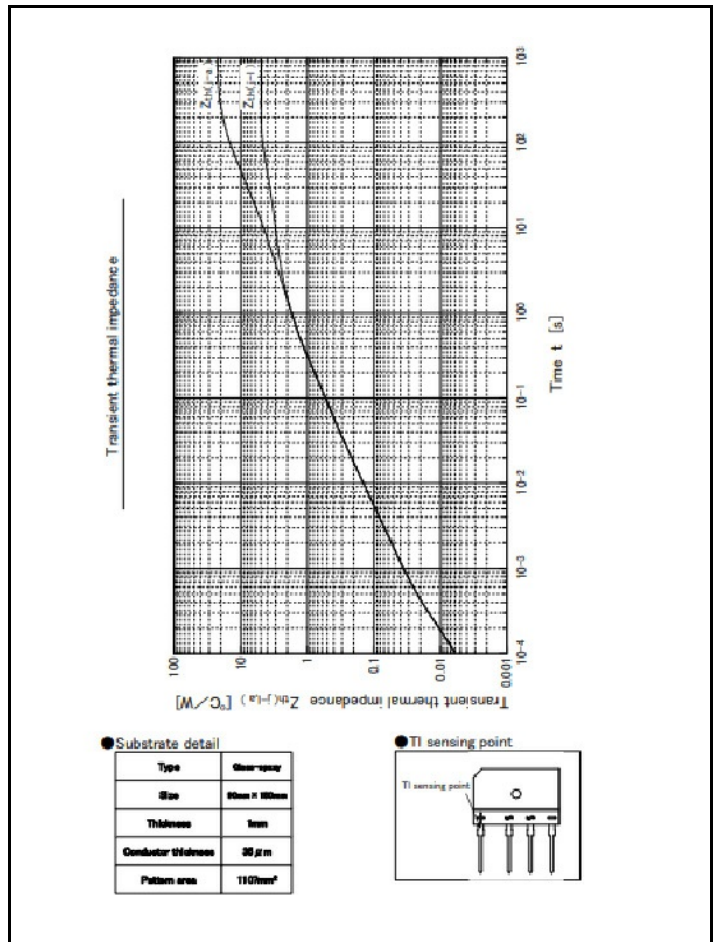
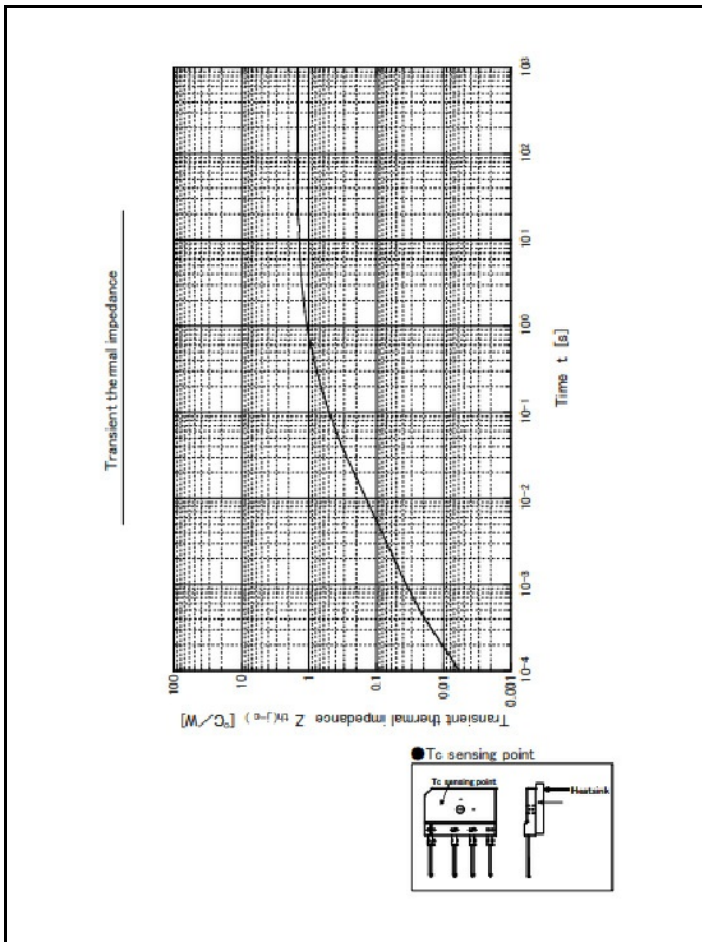
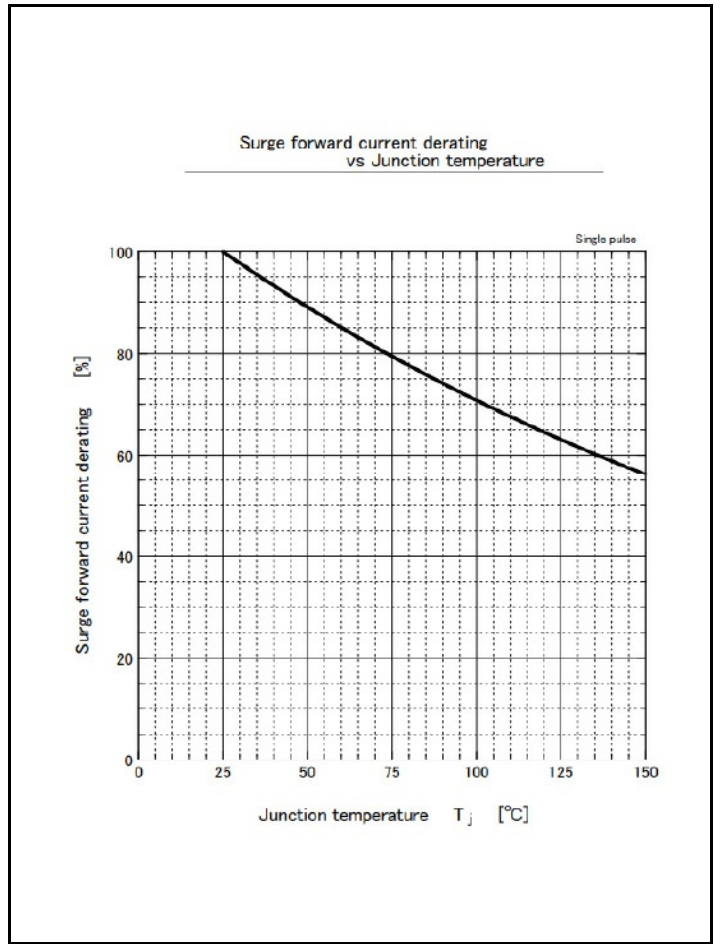
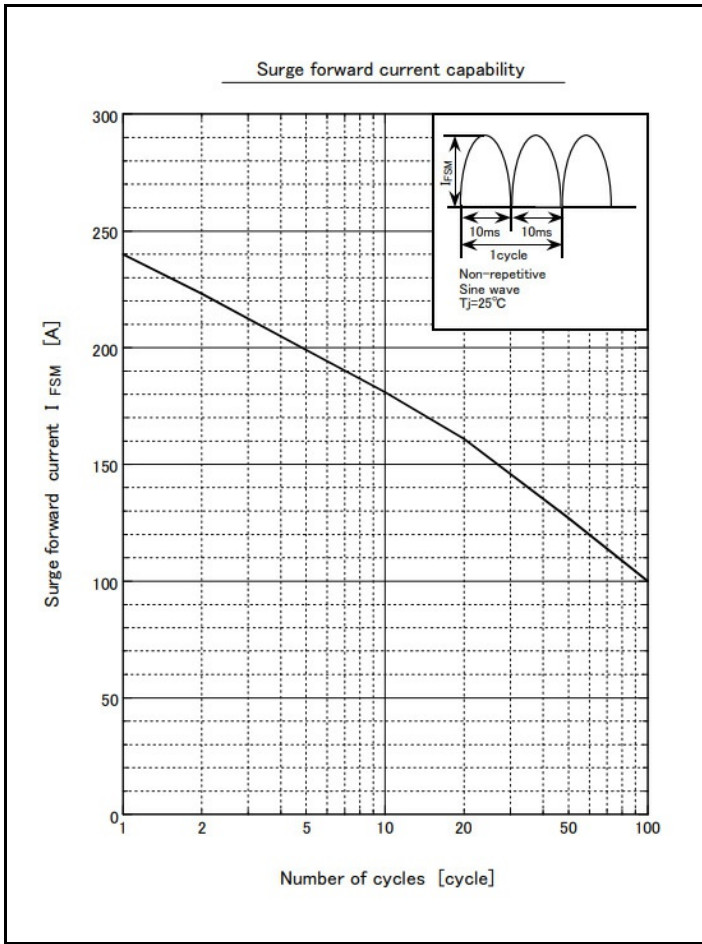


Derating curve



Substrate detail

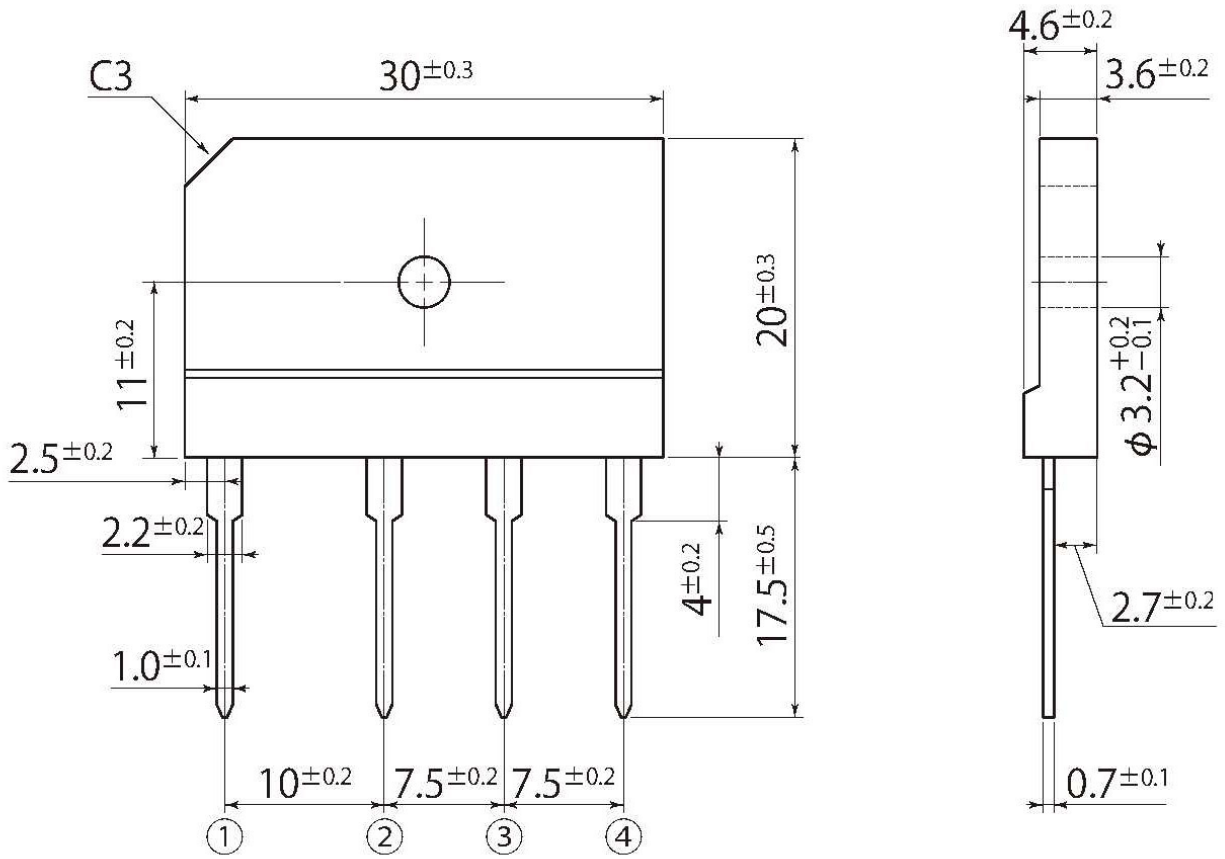
Type	Clear-spray
Size	80mm x 150mm
Thickness	1mm
Conductor thickness	35 $\mu\text{m}$
Pattern area	1107mm <sup>2</sup>





D4

JEDEC Code	-
JEITA Code	-
House Name	5S



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