ShinDengen

S2WB(A)80-7062

Bridge Diodes
800V, 2.0A

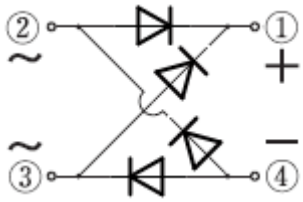
Feature

- Small SMD (There is also DIP)
- High I_{FSM}
- High Reliability
- Pb free terminal
- RoHS:Yes

OUTLINE

Package (House Name): 1W

Equivalent circuit



Absolute Maximum Ratings (unless otherwise specified : Tl=25℃)

Item	Symbol	Conditions	Ratings	Unit
Storage temperrature	Tstg		-40 to 150	℃
Junction temperature	Tj		-40 to 150	℃
Repetitive peak reverse voltage	V_{RRM}		800	V
Average forward current	I_F(AV)	50Hz sine wave, Resistance load, On glass-epoxy substrate, Tl=112℃ ※	2	A
Average forward current	I_F(AV)	50Hz sine wave, Resistance load, On glass-epoxy substrate, Ta=25℃ ※	1	A
Surge forward current	I_{FSM}	50Hz sine wave, Non-repetitive 1 cycle peak value, Tj=25℃	50	A
Surge forward current	I_{FSM1}	tp=1ms, sine wave, Non-repetitive, peak value, per diode, Tj=25℃	178	A
Current squared time	I^2t	1ms≦tp＜10ms, Tj=25℃, per diode	16	A^2s

※ ：See the original Specifications

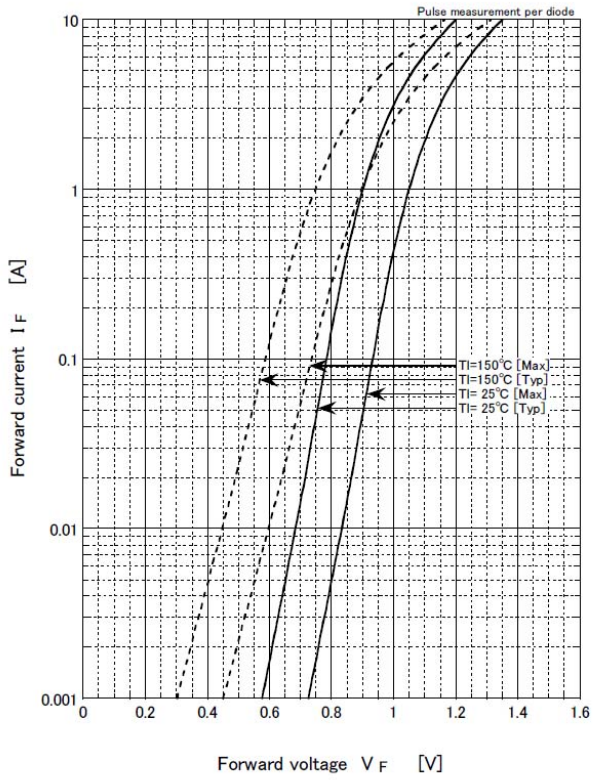
Electrical Characteristics (unless otherwise specified : Tl=25℃)

Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	V_F	IF=1A, Pulse measurement, per diode			1.05	V
Reverse current	I_R	VR=800V, Pulse measurement, per diode			10	μA
Thermal resistance	Rth(j-l)	Junction to lead, On glass-epoxy substrate ※			10	℃/W
Thermal resistance	Rth(j-a)	Junction to ambient, On glass-epoxy substrate ※			65	℃/W

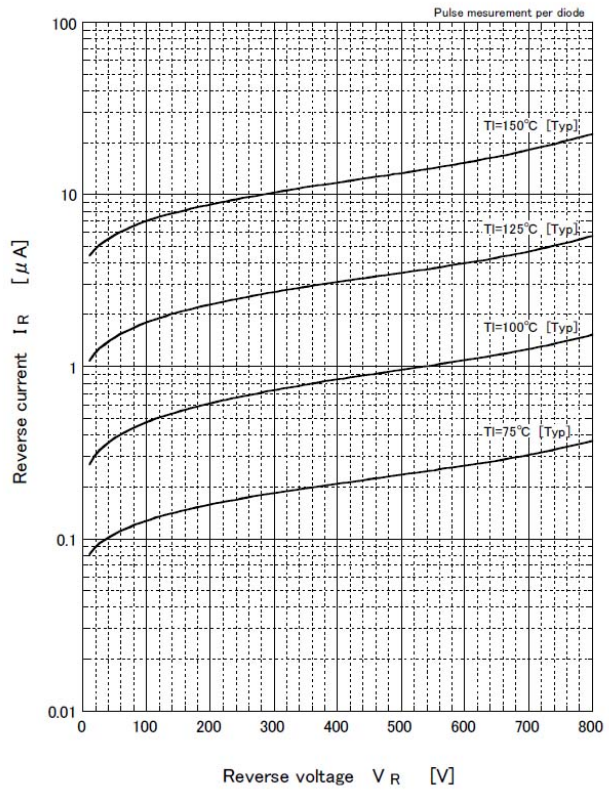
※ :See the original Specifications

CHARACTERISTIC DIAGRAMS

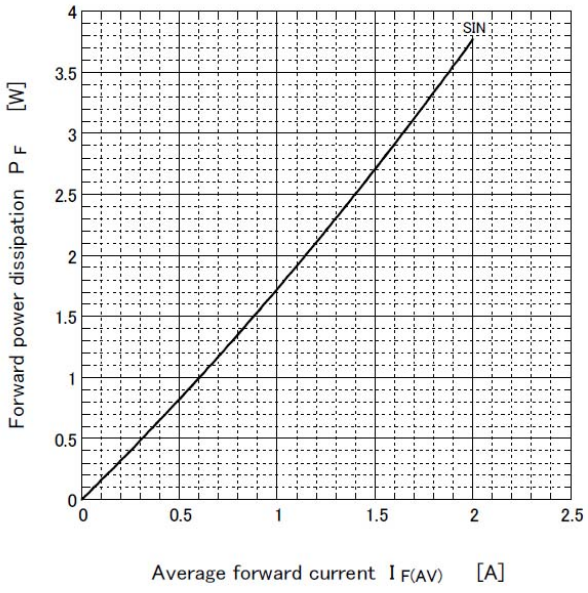
Forward voltage



Reverse current

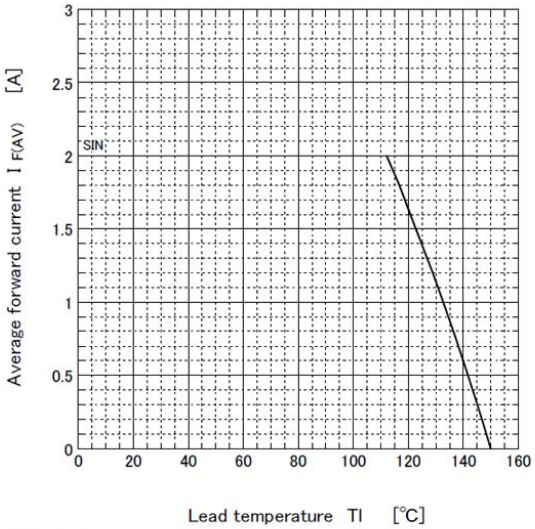


Forward power dissipation



●Tj =150℃

Derating curve

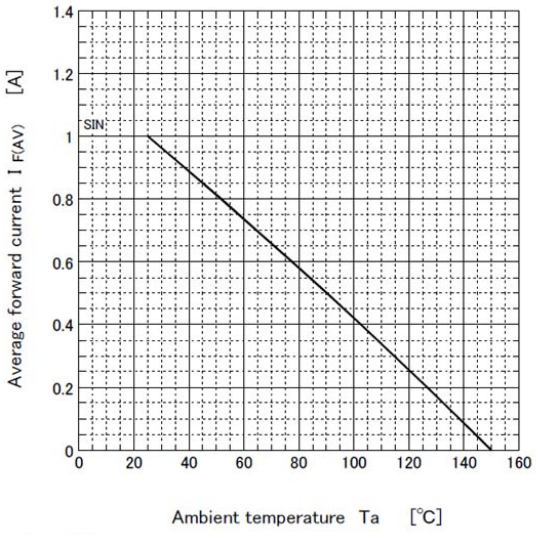


●V_R = 800V
R-load
Free in air

●Substrate detail

Item	
Substrate	Glass-epoxy
Substrate thickness	1mm
Conductor thickness	35μm

Derating curve

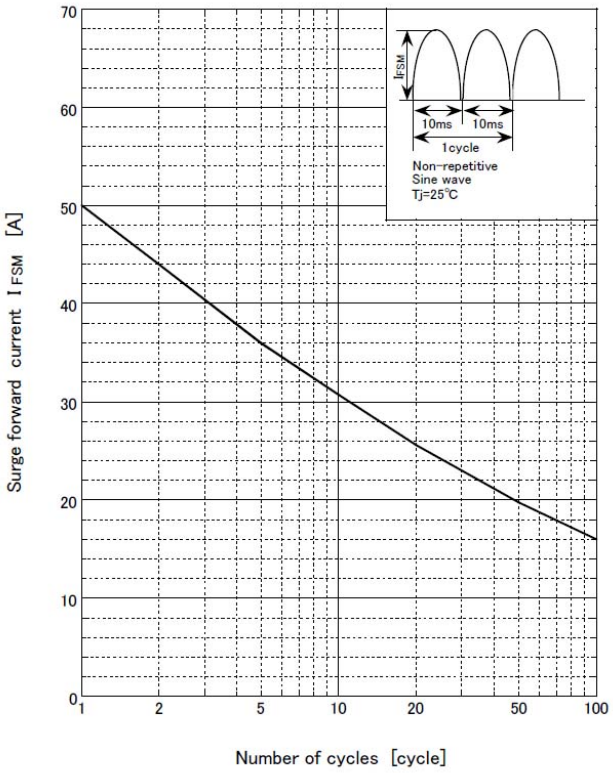


●V_R = 800V
R-load
Free in air

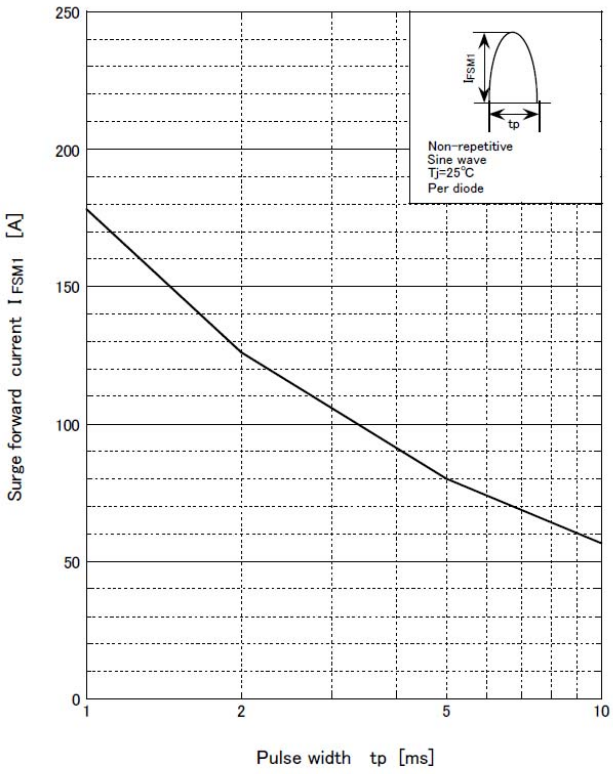
●Substrate detail

Item	
Substrate	Glass-epoxy
Substrate thickness	1mm
Conductor thickness	35μm

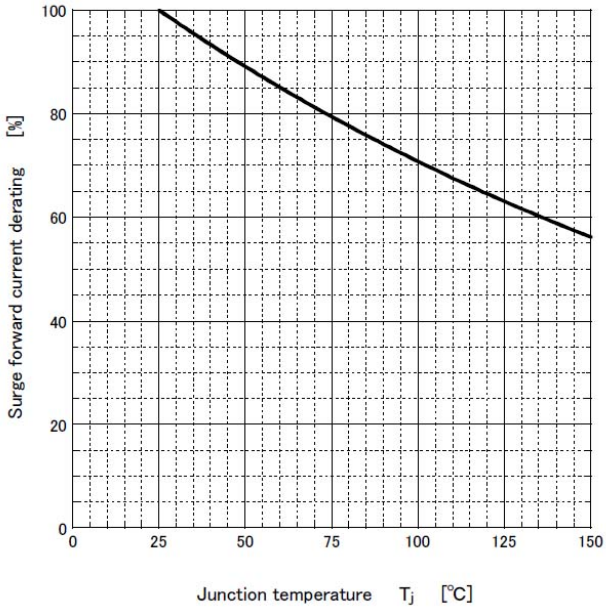
Surge forward current capability

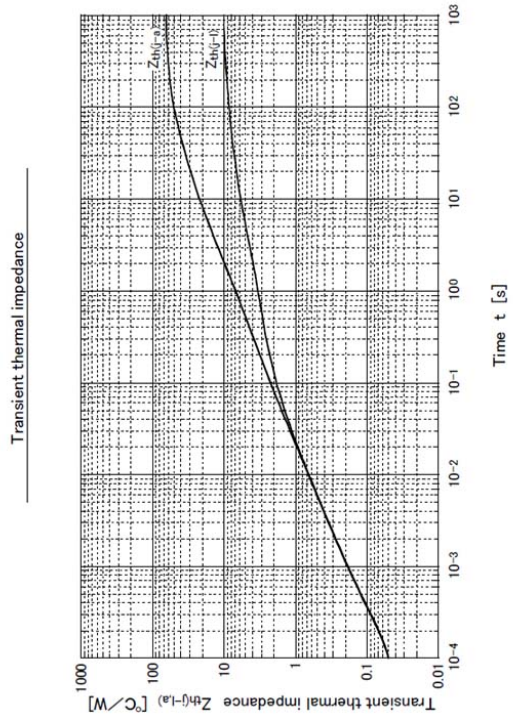


Surge forward current capability



Surge forward current derating
vs Junction temperature





● Substrate detail

Item	
Substrate	Glass-epoxy
Substrate thickness	1mm
Conductor thickness	35μm

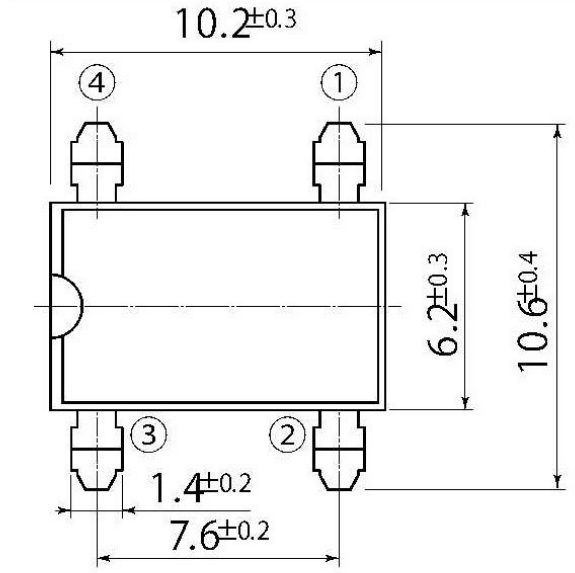
Outline Dimensions

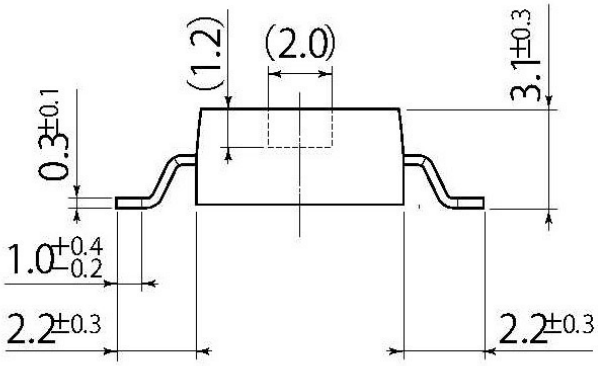
unit:mm

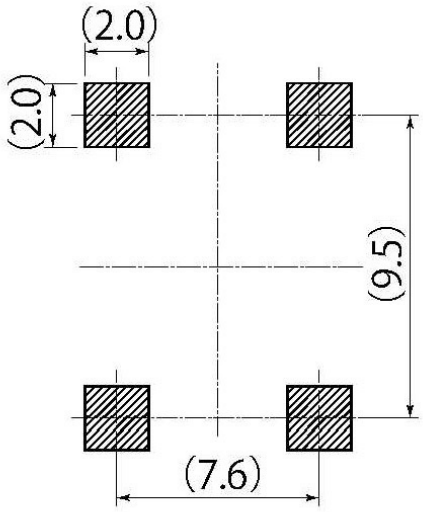
scale: 4/1

C8

JEDEC Code	–
JEITA Code	–
House Name	1W(SMD)







Referential Soldering Pad

・Optimize soldering pad to the board design and soldering condition.

Notes

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