ShinDengen

D100JHT160V

Bridge Diodes
1600V, 100A

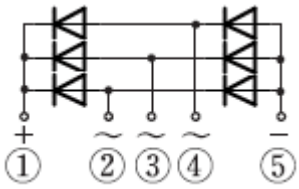
Feature

- DIP
- High Current
- UL E142422
- Pb free terminal
- RoHS:Yes

OUTLINE

Package (House Name): JH

Equivalent circuit



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

Item	Symbol	Conditions	Ratings	Unit
Storage temperrature	Tstg		-55 to 150	℃
Junction temperature	Tj		-55 to 150	℃
Repetitive peak reverse voltage	V_{RRM}		1600	V
Average forward current	I_F(AV)	50Hz sine wave, Resistance load, With heatsink, Tc=92℃	100	A
Average forward current	I_F(AV)	50Hz sine wave, Resistance load, On glass-epoxy substrate, Ta=25℃ ※	6.3	A
Surge forward current	I_{FSM}	50Hz sine wave, Non-repetitive 1 cycle peak value, per diode, Tj=25℃	580	A
Surge forward current	I_{FSM1}	tp=1ms, sine wave, Non-repetitive, peak value, per diode, Tj=25℃	1833	A
Current squared time	I^2t	1ms≦t＜10ms, per diode	1681	A^2s
Dielectric strength	Vdis	Terminals to case, AC 1 minute	2.5	kV
Mounting torque	TOR	(Recommended torque : 1.2N･m)	1.5	N･m

※ ：See the original Specifications

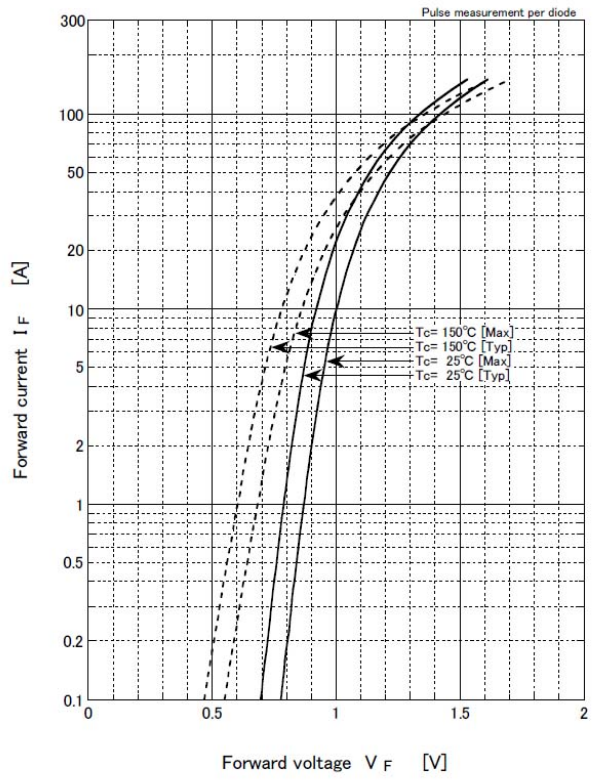
Electrical Characteristics (unless otherwise specified : Tc=25℃)

Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	V_F	IF=35A, Pulse measurement, per diode			1.15	V
Reverse current	I_R	VR=1600V, Pulse measurement, per diode			10	μA
Thermal resistance	Rth(j-c)	Junction to case, With heatsink			0.2	℃/W
Thermal resistance	Rth(j-a)	Junction to ambient, Without heatsink ※			11	℃/W

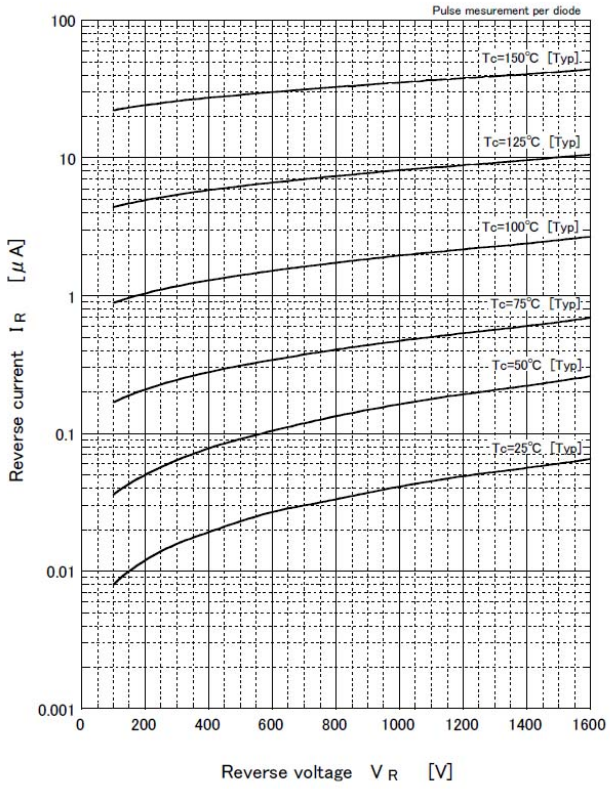
※ :See the original Specifications

CHARACTERISTIC DIAGRAMS

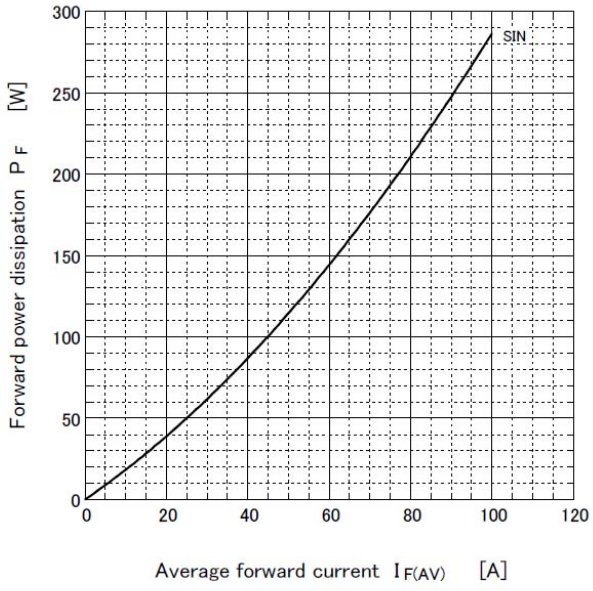
Forward voltage



Reverse current

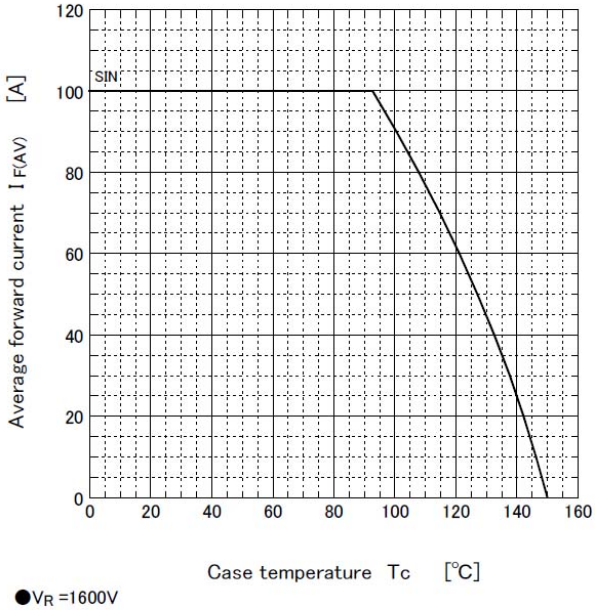


Forward power dissipation

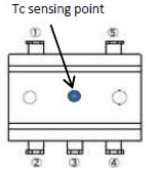


●Tj =150℃

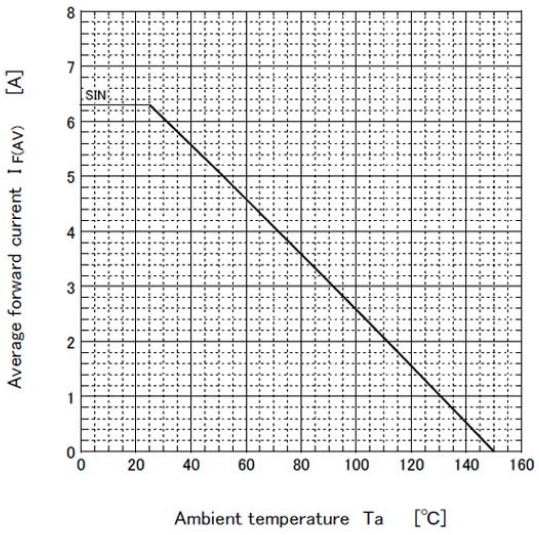
Derating curve



●V R =1600V
R-load
With heatsink



Derating curve

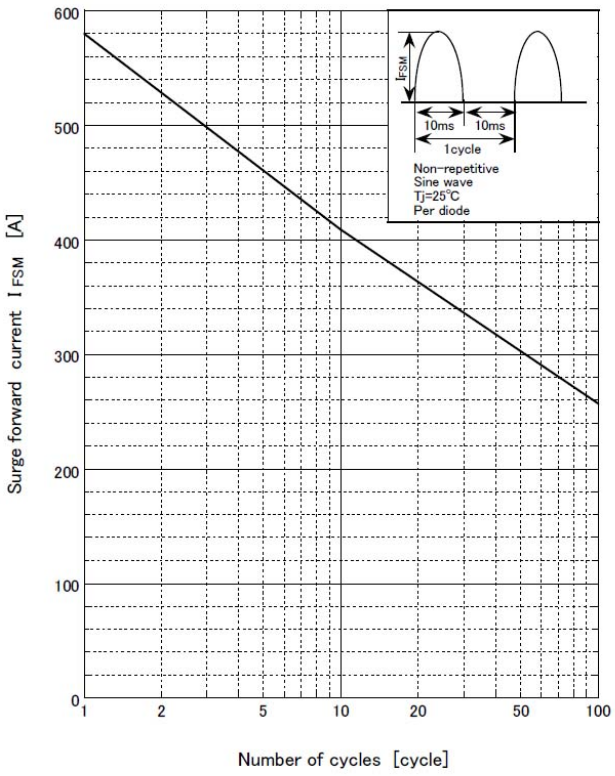


●V_R = 1600V
R-load
Free in air

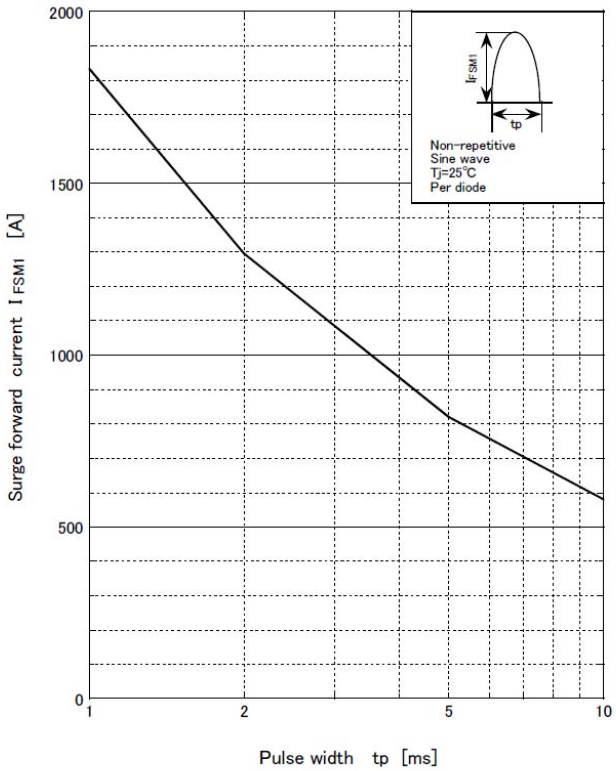
●Substrate detail

Type	Glass-epoxy
Size	150mm X90mm
Thickness	1mm
Conductor thickness	35μm
Pattern area	2000mm²

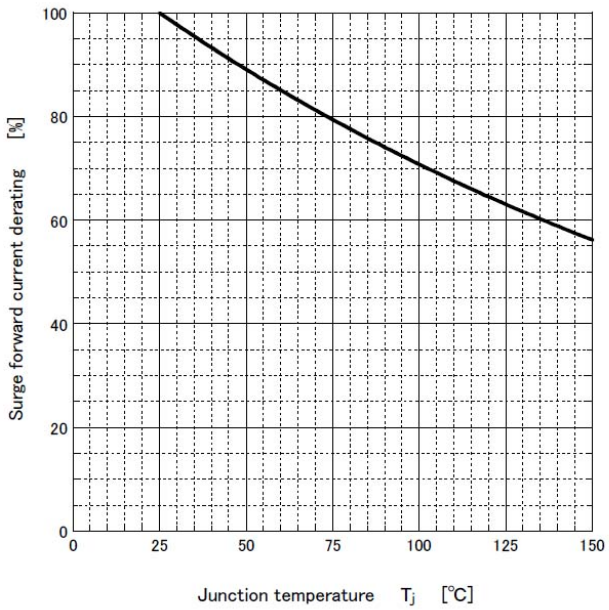
Surge forward current capability

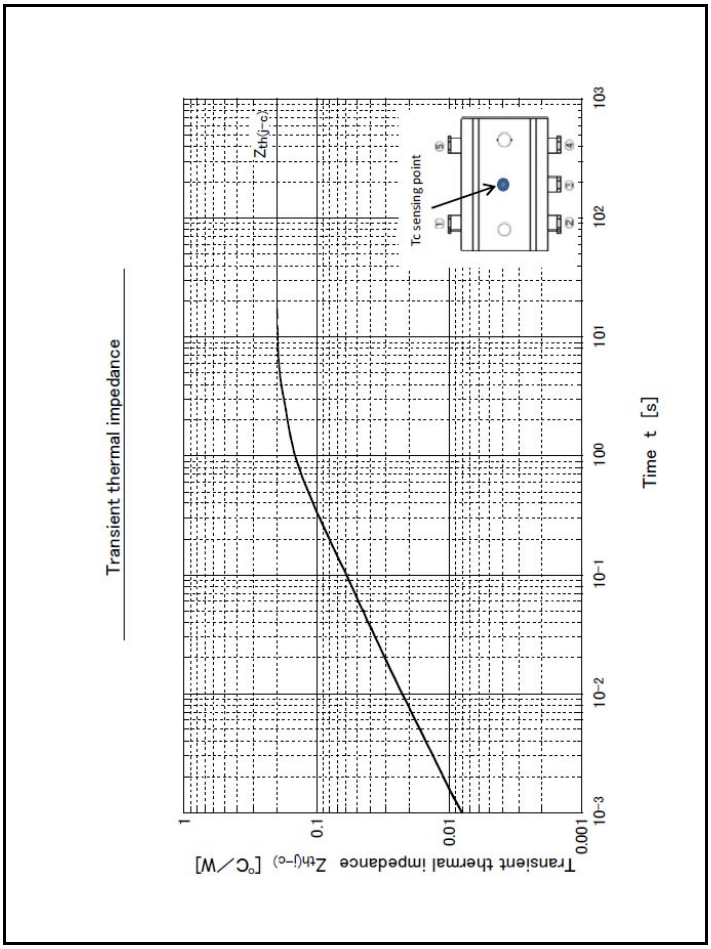


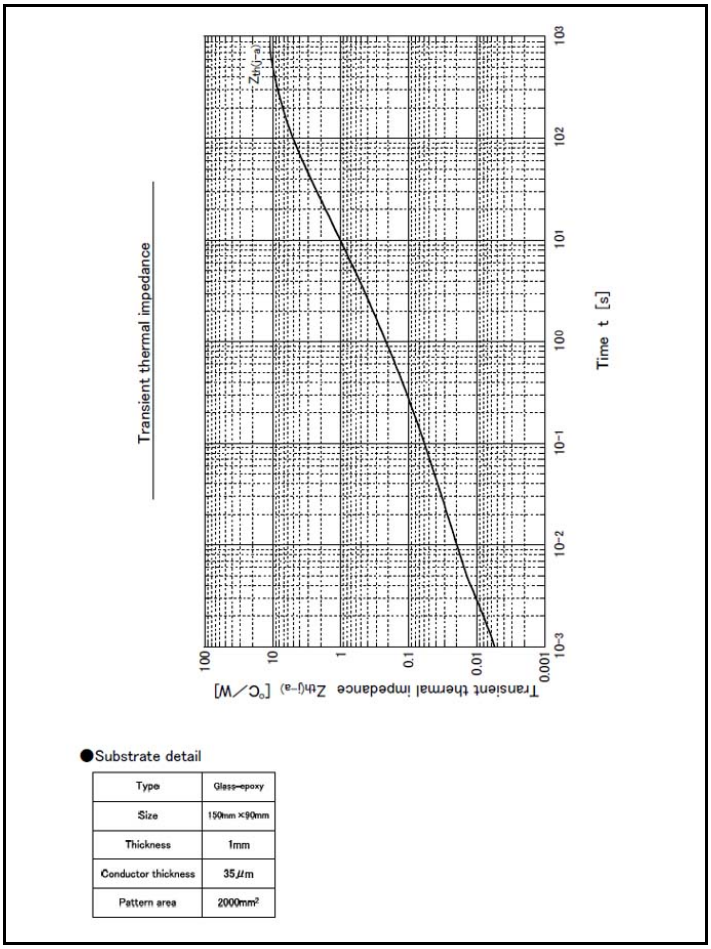
Surge forward current capability



Surge forward current derating
vs Junction temperature







●Substrate detail

Type	Glass-epoxy
Size	150mm ×90mm
Thickness	1mm
Conductor thickness	35μm
Pattern area	2000mm²

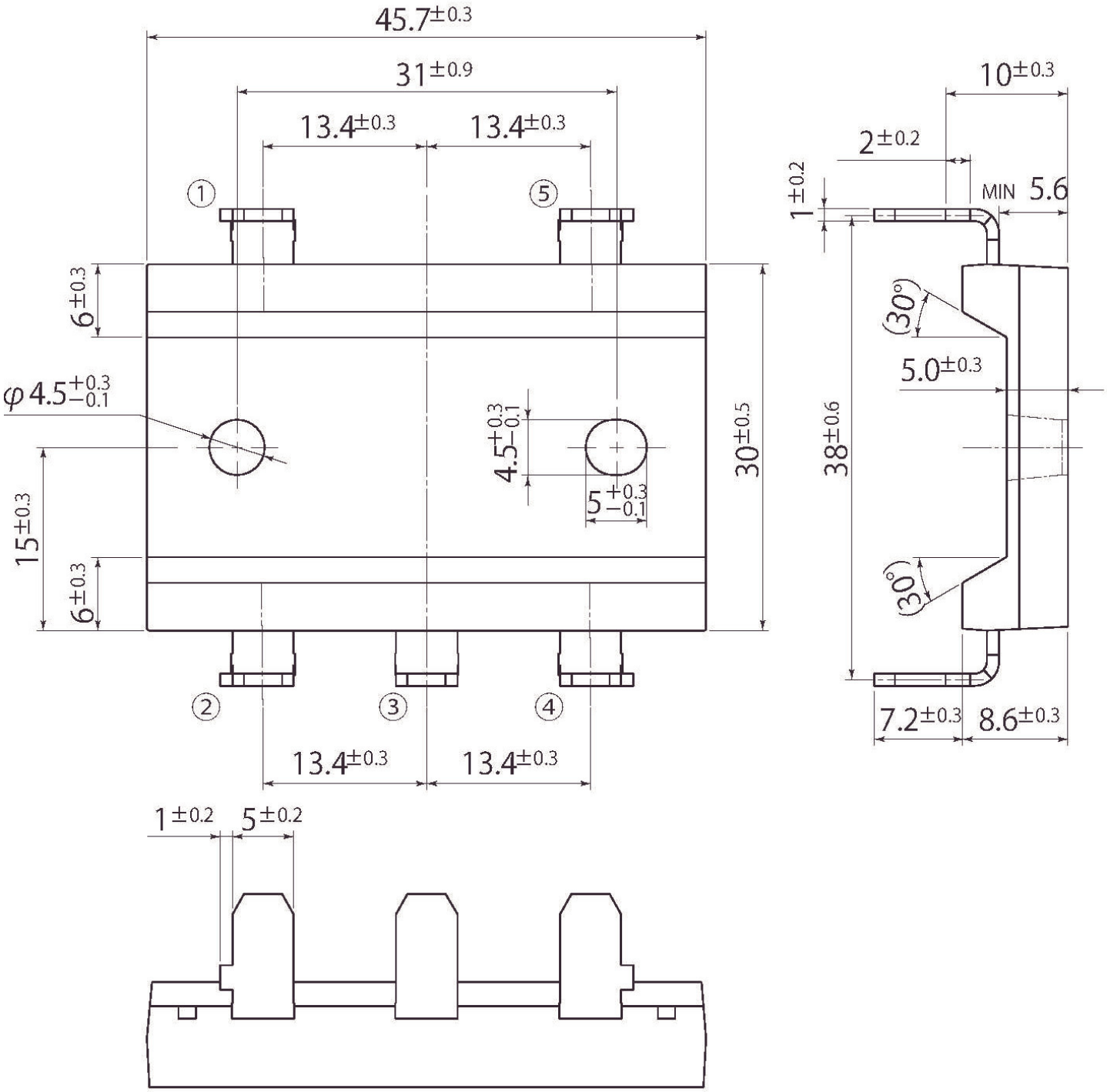
Outline Dimensions

unit:mm

scale: 2/1

D10

JEDEC Code	–
JEITA Code	–
House Name	JH



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