

D100JHT160V

Bridge Diodes
1600V, 100A

Feature

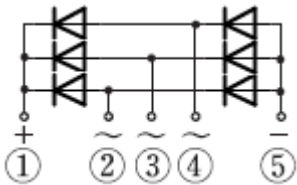
- DIP
- High Current
- UL E142422
- Pb free terminal
- RoHS:Yes

OUTLINE

Package (House Name): JH



Equivalent circuit



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

Item	Symbol	Conditions	Ratings	Unit
Storage temperrature	Tstg		-55 to 150	°C
Junction temperature	Tj		-55 to 150	°C
Repetitive peak reverse voltage	VRRM		1600	V
Average forward current	IF(AV)	50Hz sine wave, Resistance load, With heatsink, Tc=92°C	100	A
Average forward current	IF(AV)	50Hz sine wave, Resistance load, On glass-epoxy substrate, Ta=25°C ※	6.3	A
Surge forward current	IFSM	50Hz sine wave, Non-repetitive 1 cycle peak value, per diode, Tj=25°C	580	A
Surge forward current	IFSM1	tp=1ms, sine wave, Non-repetitive, peak value, per diode, Tj=25°C	1833	A
Current squared time	I ² t	1ms≤t<10ms, per diode	1681	A ² s
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

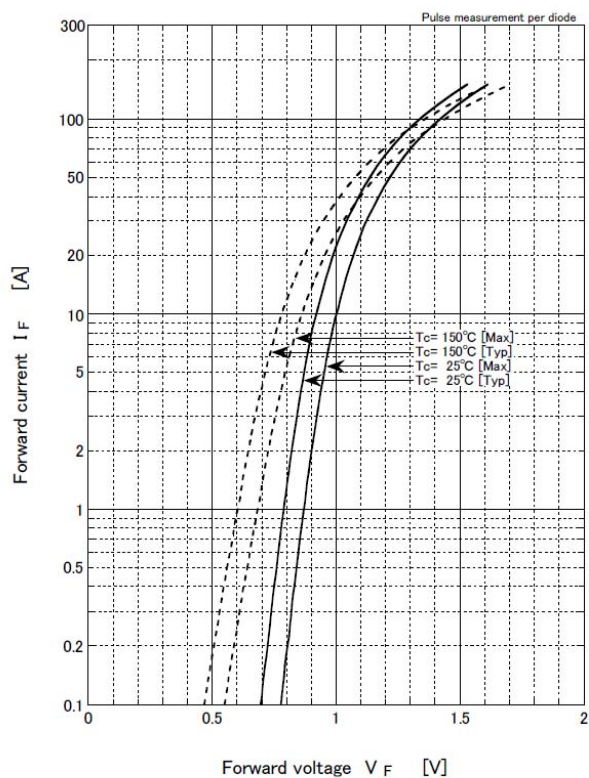
Electrical Characteristics (unless otherwise specified : Tc=25°C)

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	°C/W
Thermal resistance	Rth(j-a)	Junction to ambient, Without heatsink ※			11	°C/W

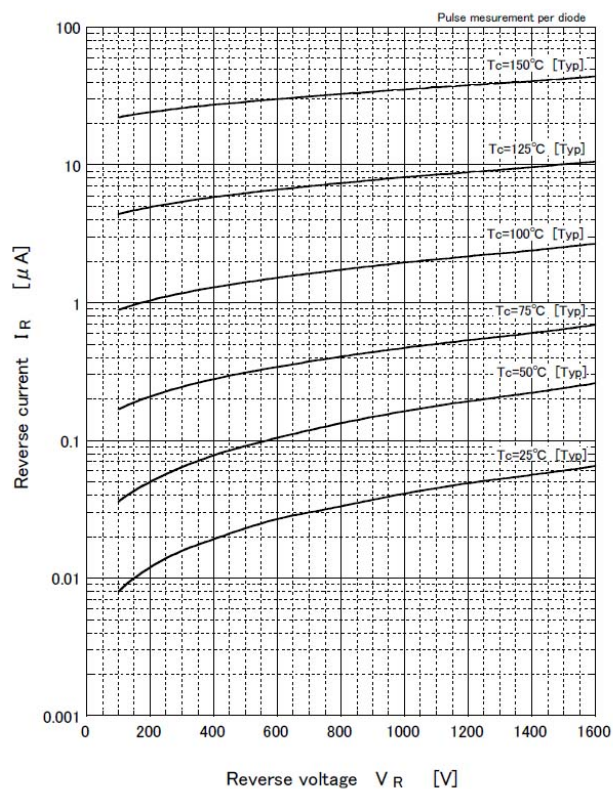
※ : See the original Specifications

CHARACTERISTIC DIAGRAMS

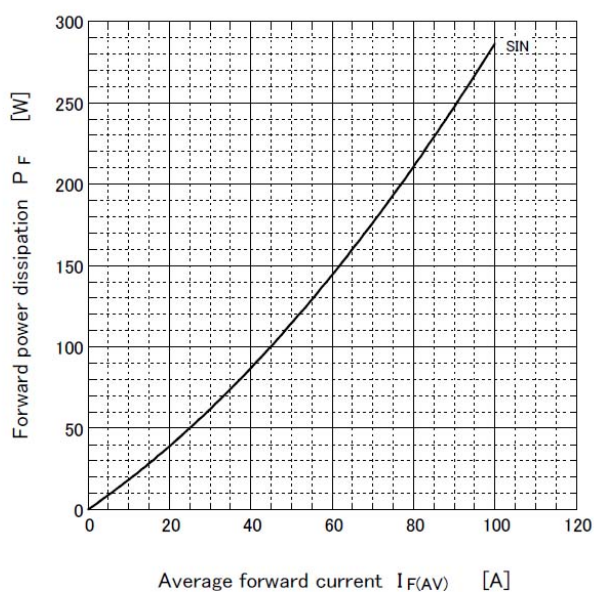
Forward voltage



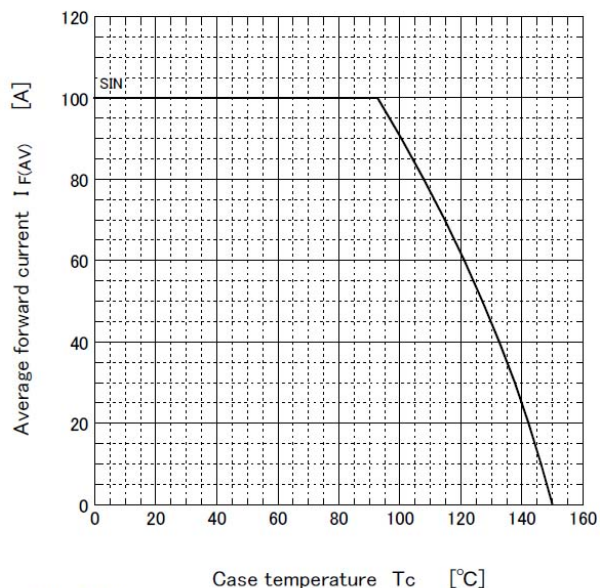
Reverse current



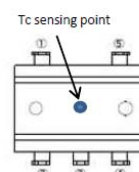
Forward power dissipation



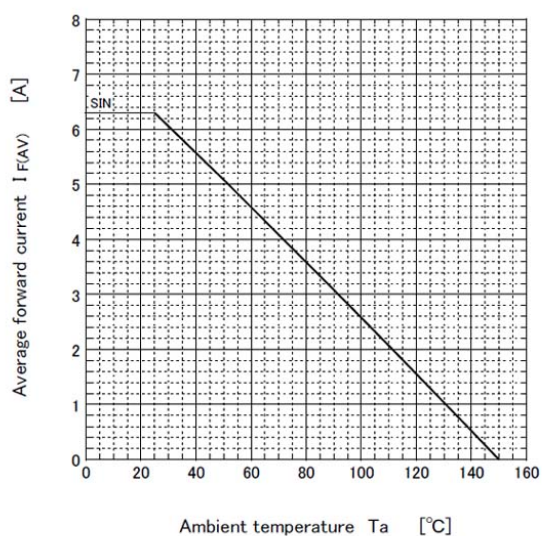
Derating curve



● $V_R = 1600\text{V}$
R-load
With heatsink



Derating curve

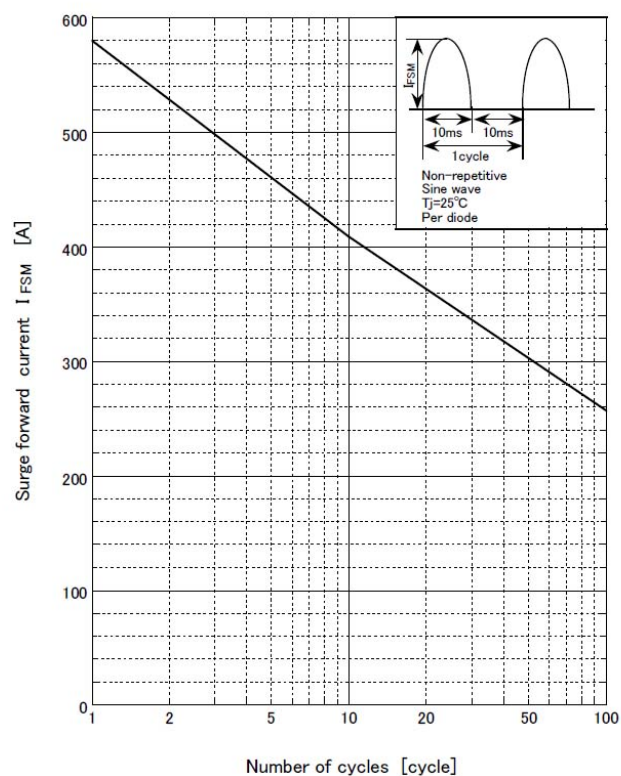


● $V_R = 1600V$
R-load
Free in air

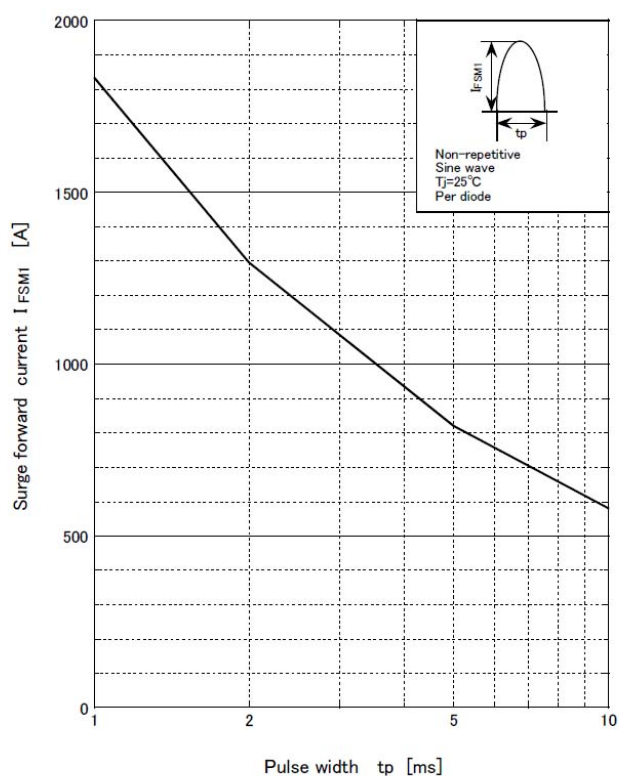
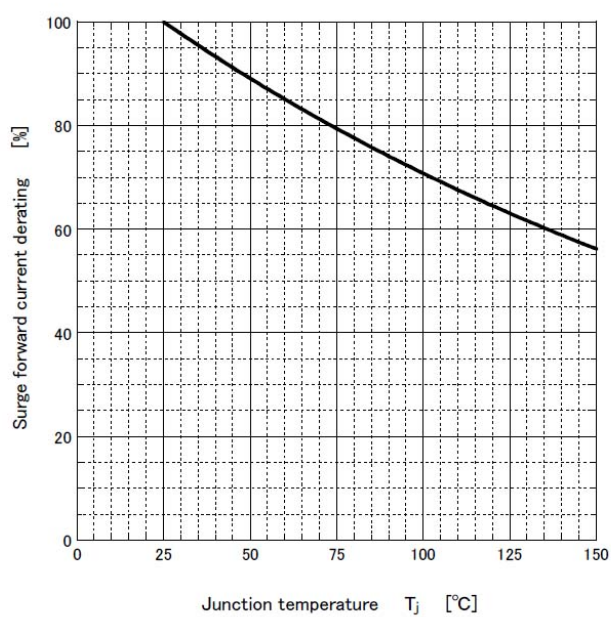
● Substrate detail

Type	Glass/epoxy
Size	150mm X 90mm
Thickness	1mm
Conductor thickness	35 μm
Pattern area	2000mm ²

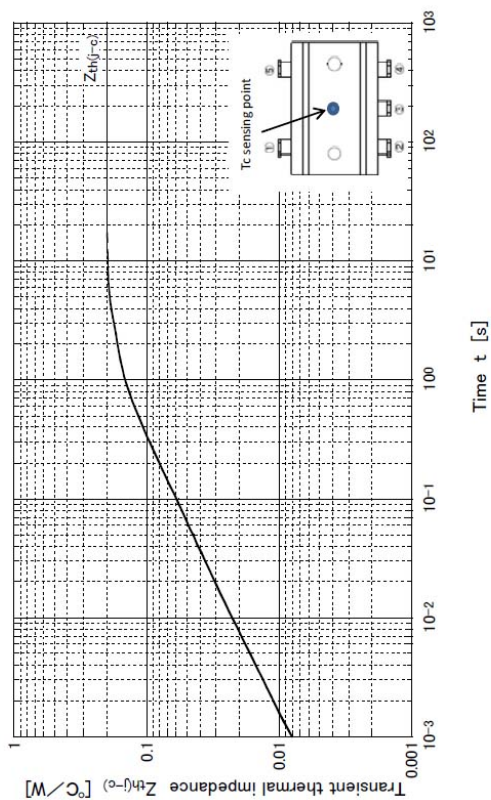
Surge forward current capability



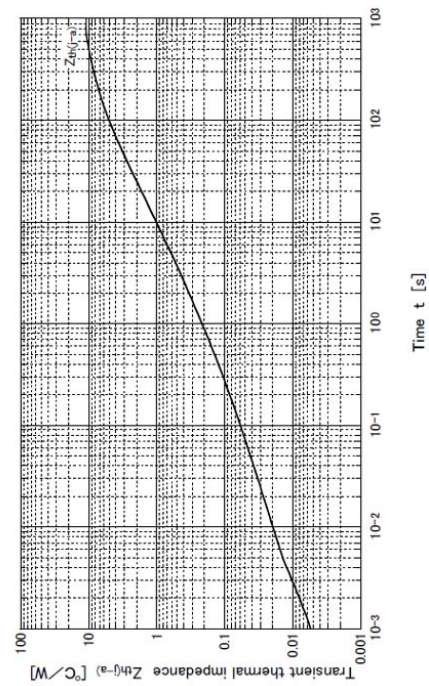
Surge forward current capability

Surge forward current derating
vs Junction temperature

Transient thermal impedance



Transient thermal impedance

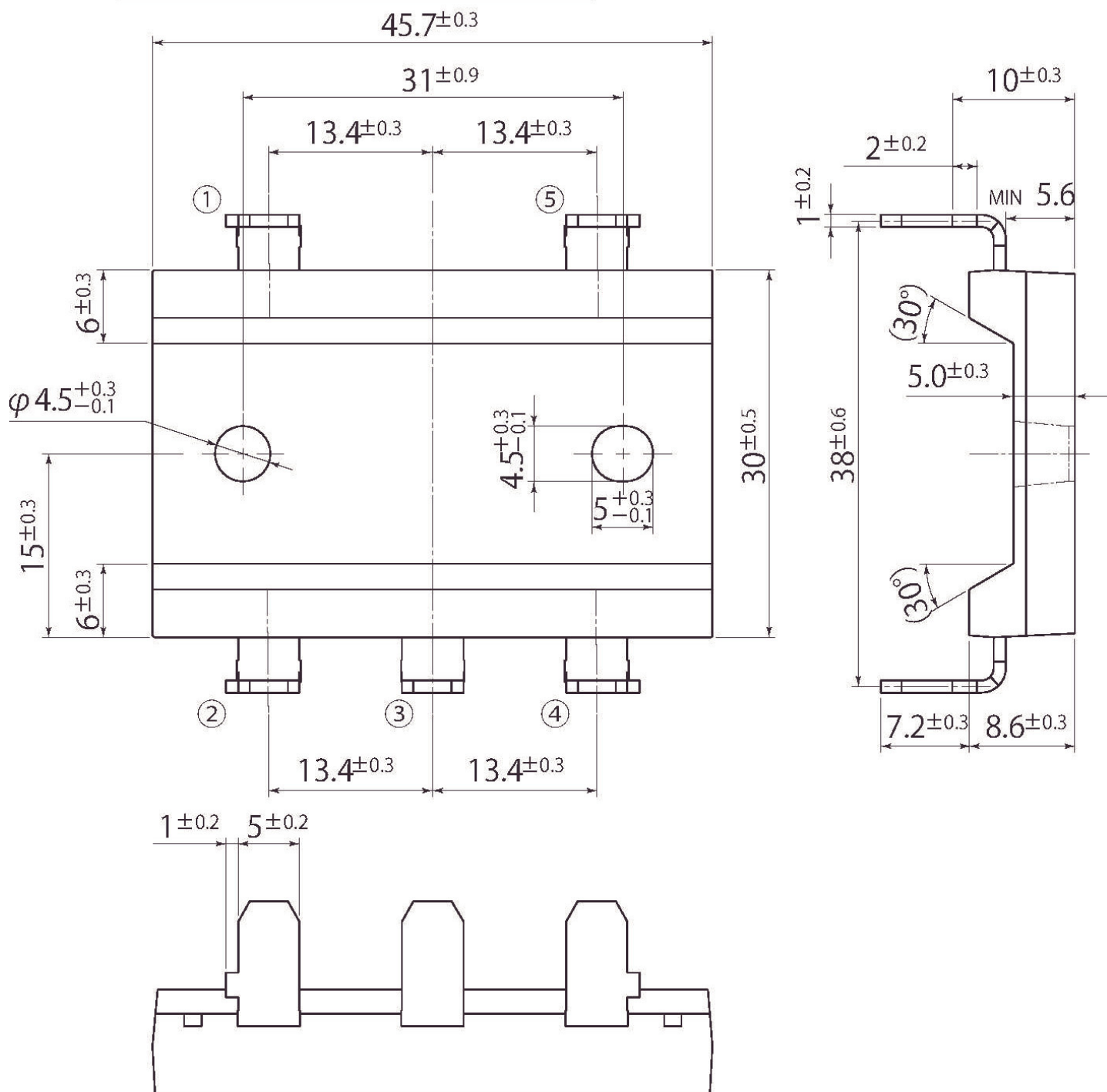


● Substrate detail

Type	Glass-epoxy
Size	150mm×90mm
Thickness	1mm
Conductor thickness	35μm
Pattern area	2000mm ²

D10

JEDEC Code	—
JEITA Code	—
House Name	JH



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