

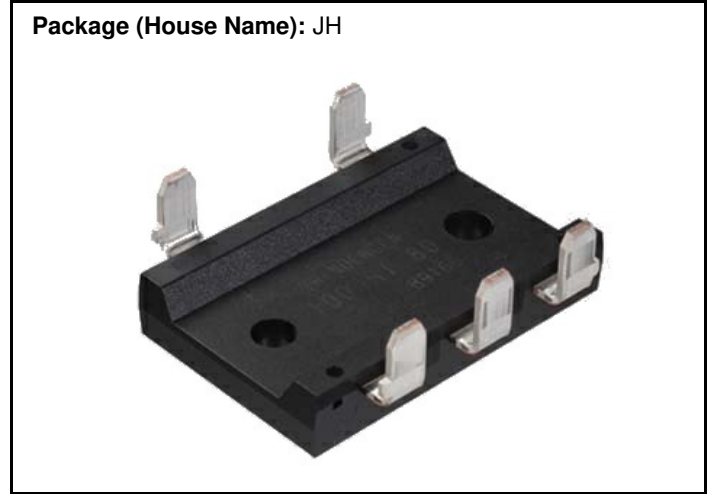
D100JHT160V

Bridge Diodes
1600V, 100A

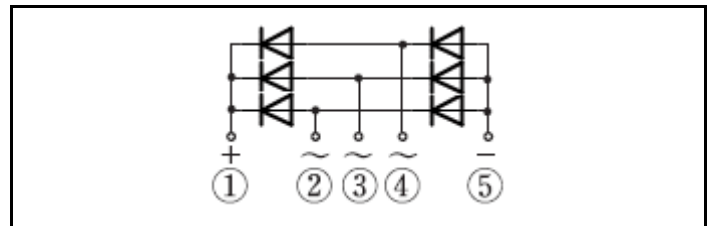
Feature

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

OUTLINE



Equivalent circuit



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

Item	Symbol	Conditions	Ratings	Unit
Storage temperature	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

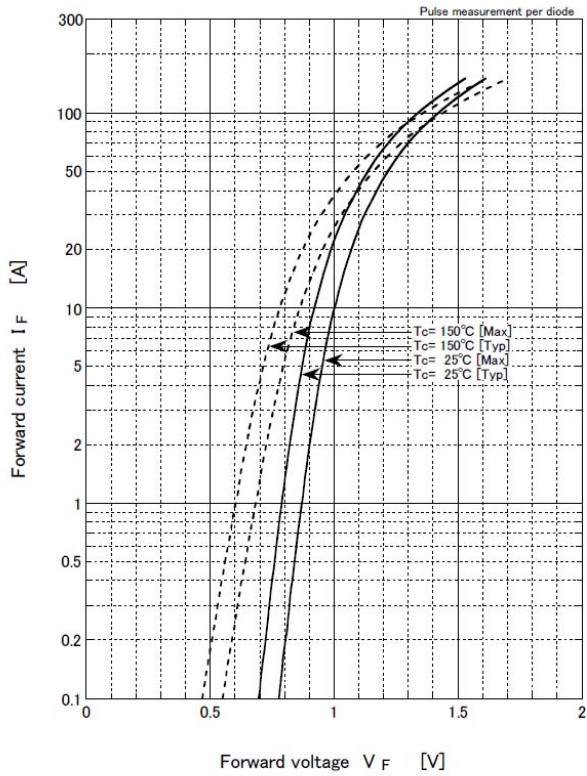
Electrical Characteristics (unless otherwise specified : Tc=25°C)

Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	V _F	I _F =35A, Pulse measurement, per diode			1.15	V
Reverse current	I _R	V _R =1600V, Pulse measurement, per diode			10	μA
Thermal resistance	R _{th(j-c)}	Junction to case, With heatsink			0.2	°C/W
Thermal resistance	R _{th(j-a)}	Junction to ambient, Without heatsink ※			11	°C/W

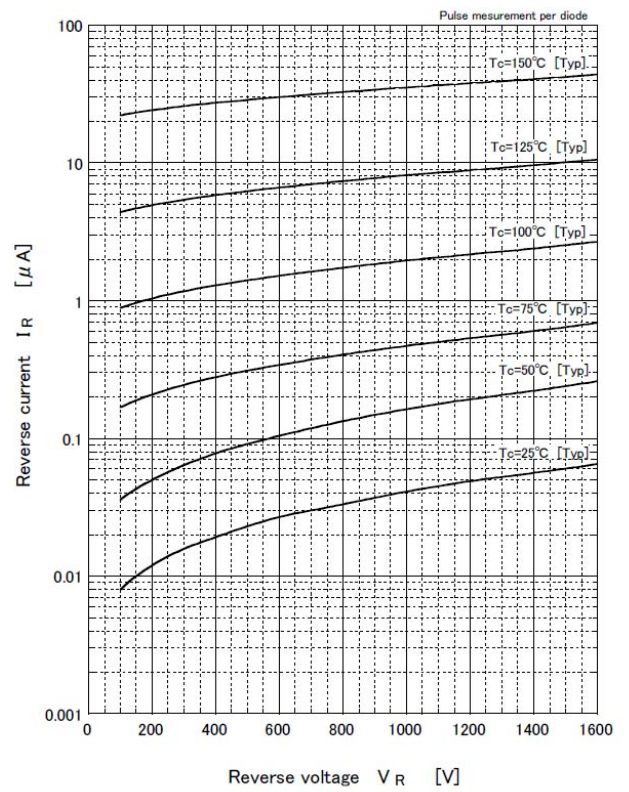
※ : See the original Specifications

CHARACTERISTIC DIAGRAMS

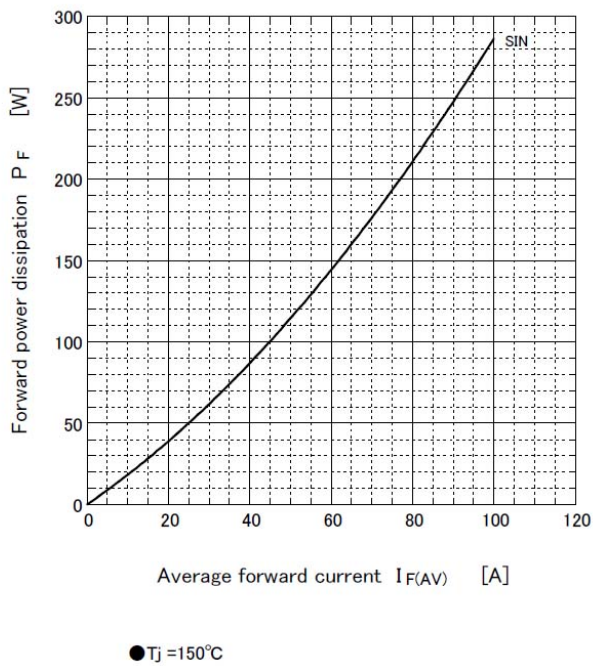
Forward voltage



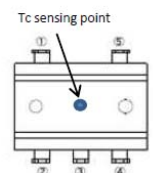
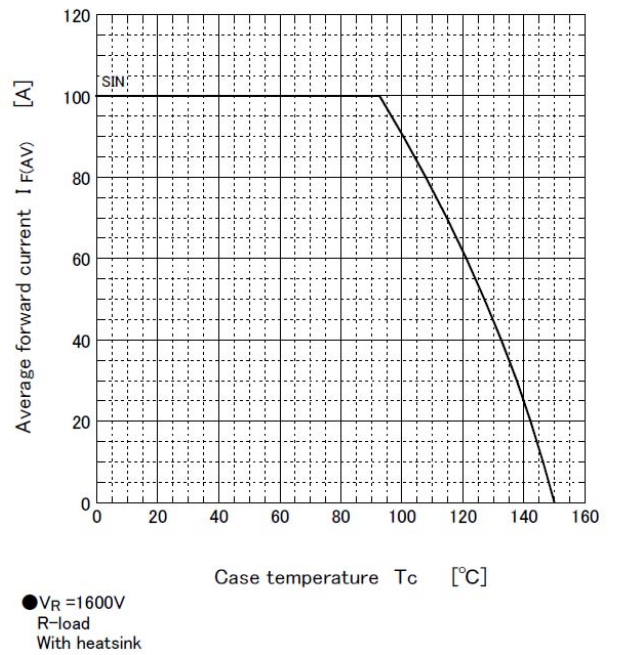
Reverse current



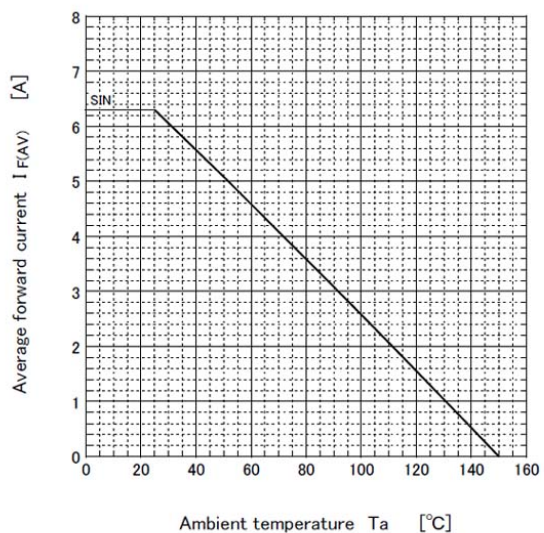
Forward power dissipation



Derating curve



Derating curve

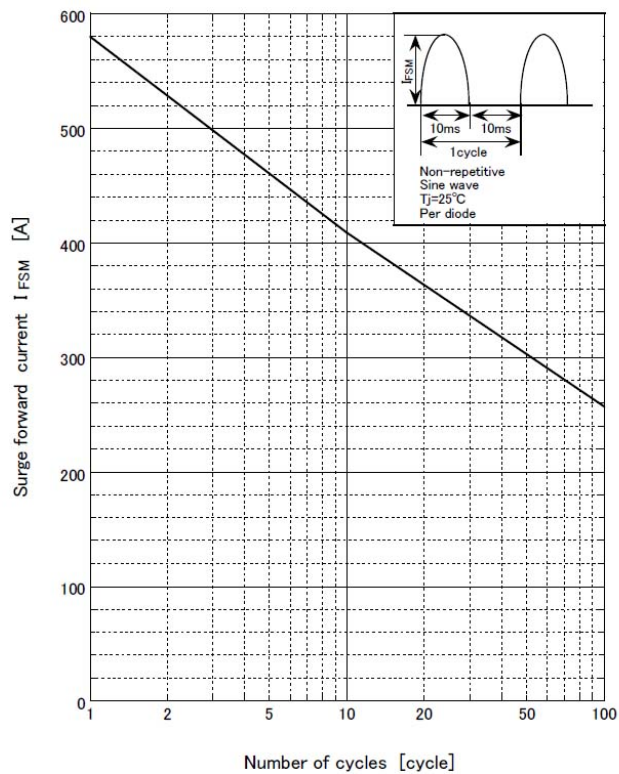


● $V_R = 1600V$
 R-load
 Free in air

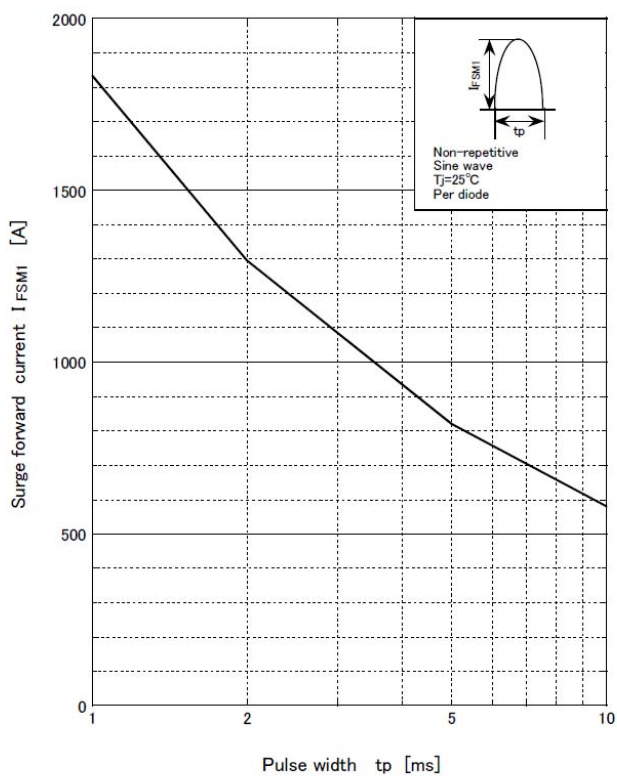
● Substrate detail

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

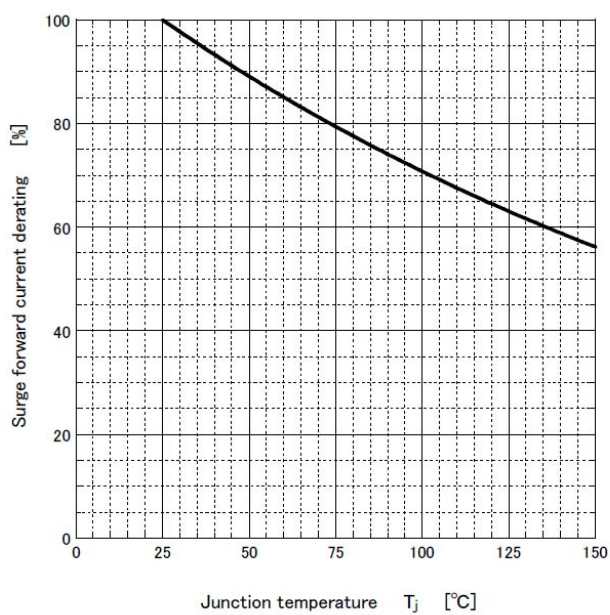
Surge forward current capability



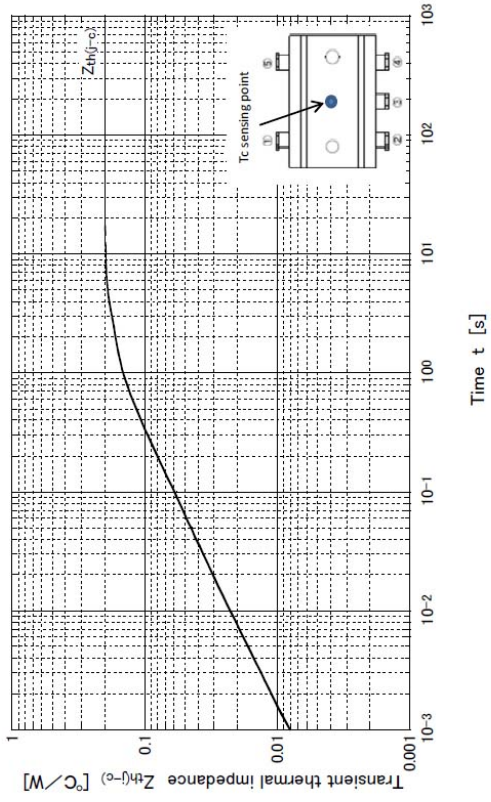
Surge forward current capability



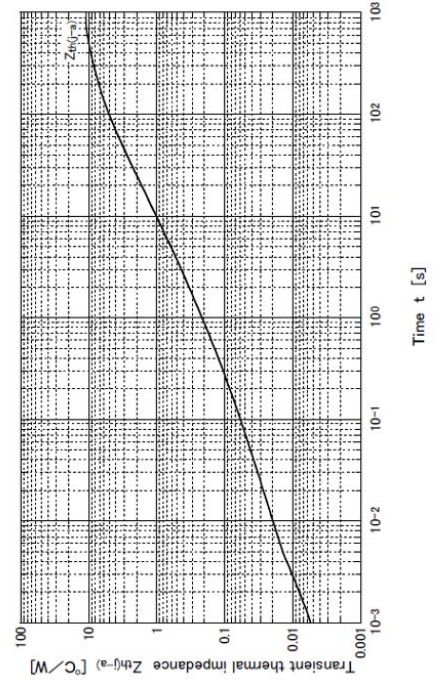
Surge forward current derating vs Junction temperature



Transient thermal impedance



Transient thermal impedance



● Substrate detail

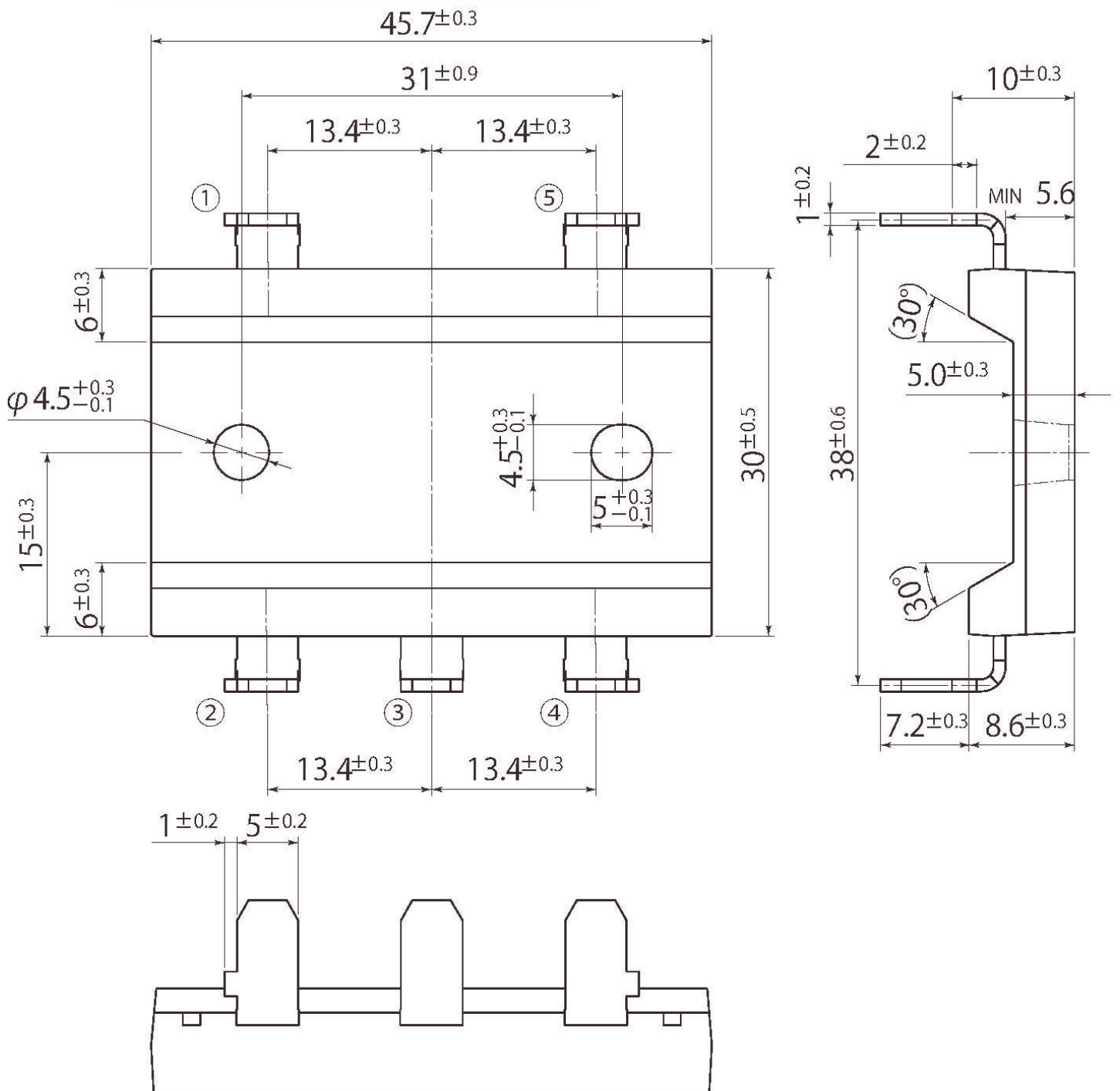
Type	Glass-epoxy
Size	150mm×90mm
Thickness	1mm
Conductor thickness	35μm
Pattern area	2000mm ²

Outline Dimensions

unit:mm

scale: 2/1

D10	JEDEC Code	—
	JEITA Code	—
	House Name	JH



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