ShinDengen

D30XB80

Bridge Diodes
800V, 30A

Feature
- Compact SIP
- UL E142422
- High Current
- High heat dissipation
- Pb free terminal
- RoHS:Yes

OUTLINE

Package (House Name): 5S

Equivalent circuit

Absolute Maximum Ratings

Item	Symbol	Conditions	Ratings	Unit
Storage temperrature	Tstg		-55 to 150	°C
Junction temperature	Tj		-55 to 150	°C
Repetitive peak reverse voltage	V_{RRM}		800	V
Average forward current	I_F(AV)	60Hz sine wave, Resistance load, With heatsink, Tc=87°C	30	A
Average forward current	I_F(AV)	60Hz sine wave, Resistance load, On glass-epoxy substrate, Tl=124°C ※	3.07	A
Average forward current	I_F(AV)	60Hz sine wave, Resistance load, On glass-epoxy substrate, Ta=25°C ※	3.07	A
Surge forward current	I_{FSM}	60Hz sine wave, Non-repetitive 1 cycle peak value, Tj=25°C	400	A
Current squared time	I^2t	1ms≦tp＜8.3ms, Tj=25°C, per diode	670	A^2s
Dielectric strength	Vdis	Terminals to case, AC 1 minute	2.5	kV
Mounting torque	TOR	(Recommended torque : 0.5N･m)	0.8	N･m

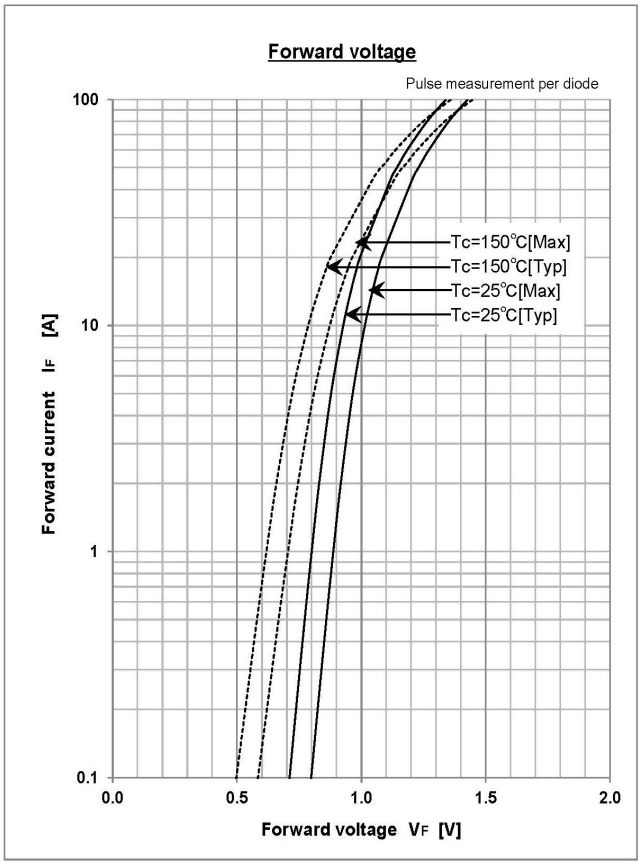
※ ：See the original Specifications

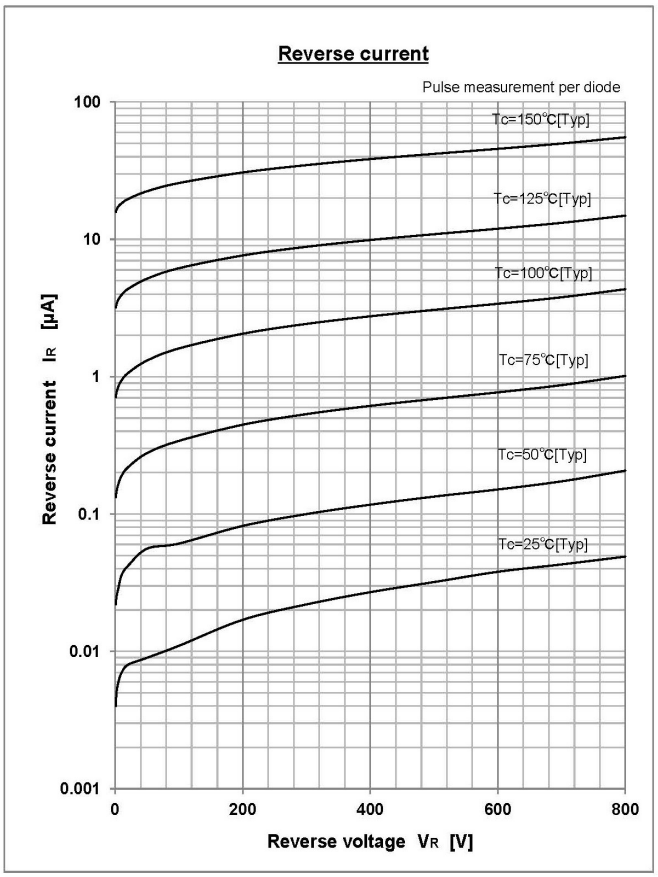
Electrical Characteristics

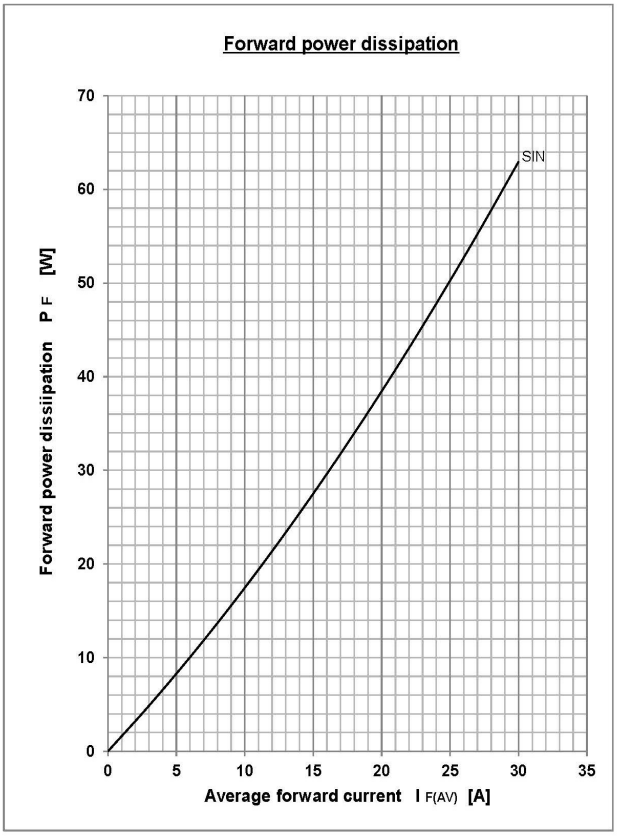
Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	V_F	IF=15A, Pulse measurement, per diode			1.05	V
Reverse current	I_R	VR=800V, Pulse measurement, per diode			10	μA
Reverse recovery time	trr	IF=0.1A, IR=0.1A, 0.1IR, per diode			27000	ns
Thermal resistance	Rth(j-c)	Junction to case, With heatsink			1	°C/W
Thermal resistance	Rth(j-l)	Junction to lead			5.2	°C/W
Thermal resistance	Rth(j-a)	Junction to ambient			25	°C/W

※ ：See the original Specifications

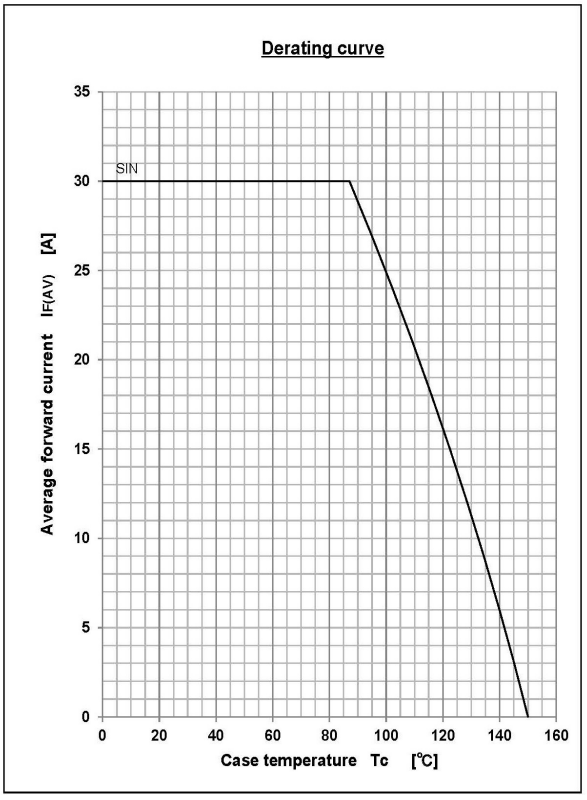
CHARACTERISTIC DIAGRAMS



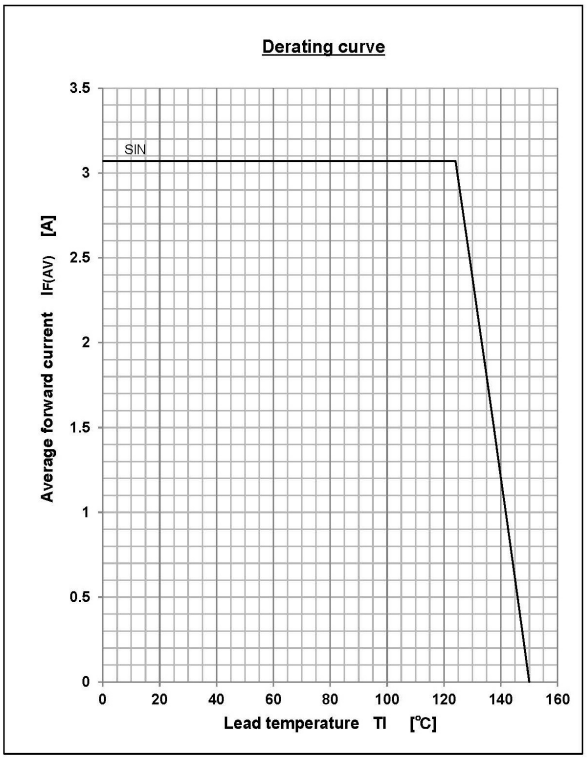




● Tj = 150 ℃



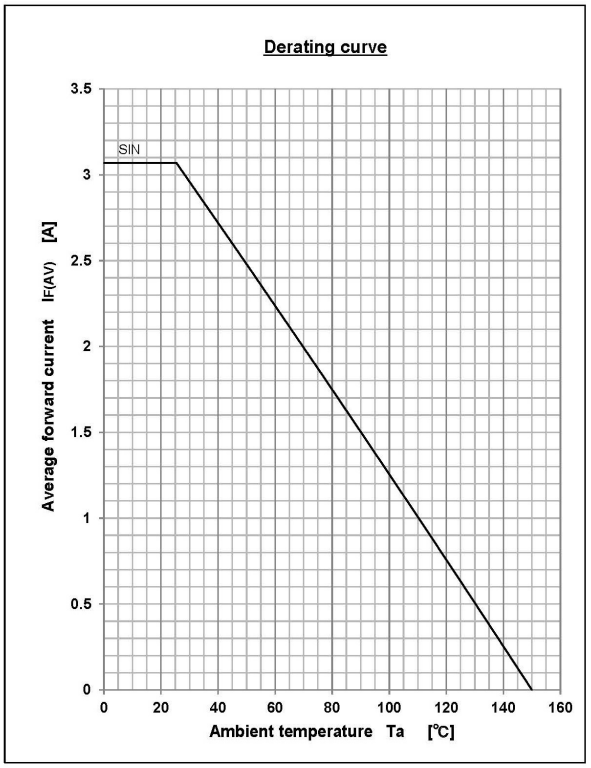
●V_R = 800 V
R - load
With heatsink



●V_R = 800 V
R - load
Free in air

●Substrate detail

Type	Glass-epoxy
Size	90mm×150mm
Thickness	1 mm
Conductor thickness	35μm
Pattern area	1107 mm^2



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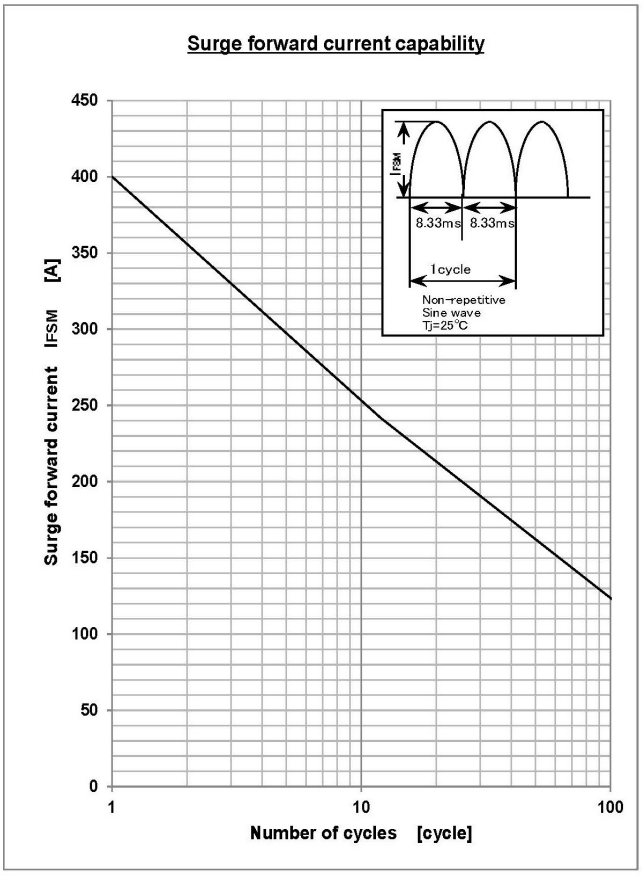
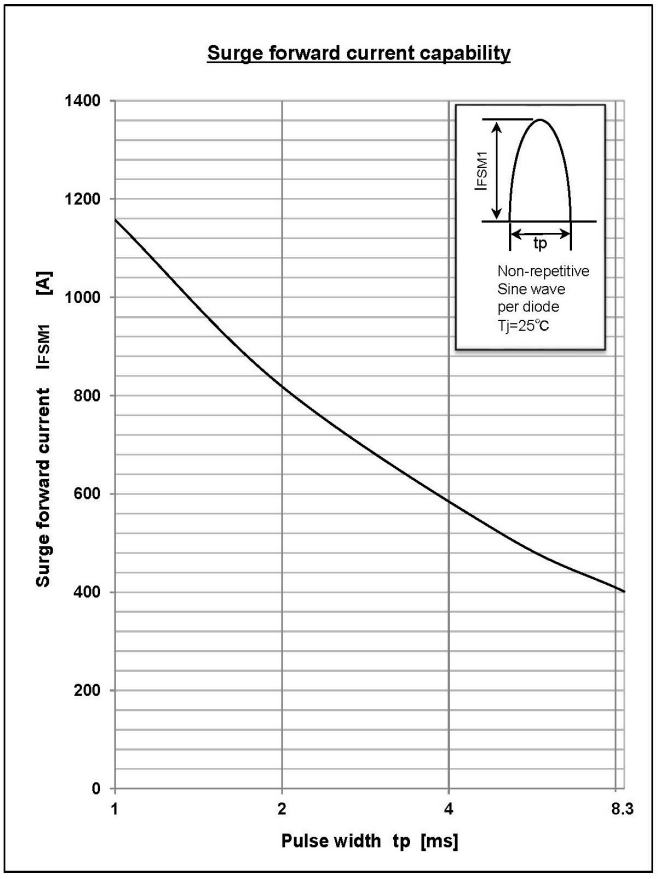
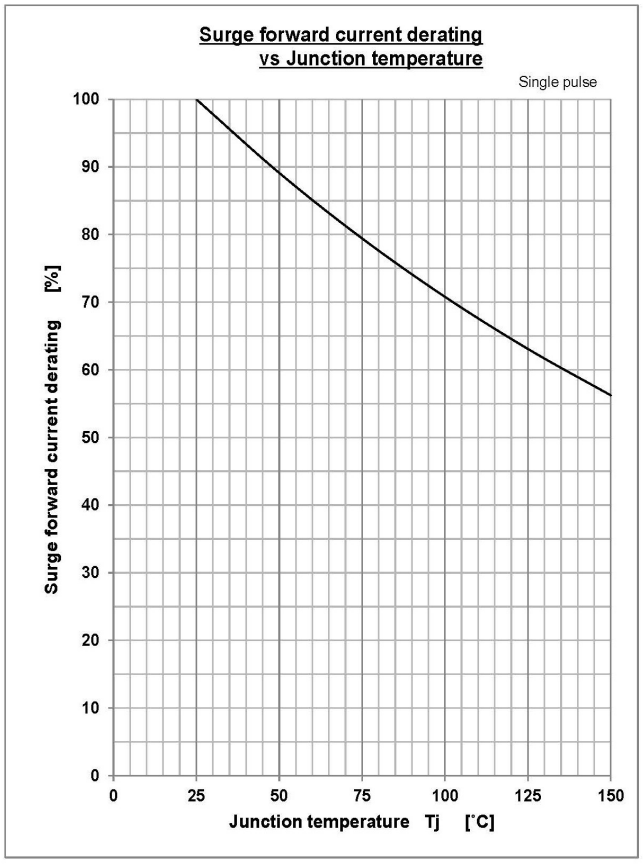
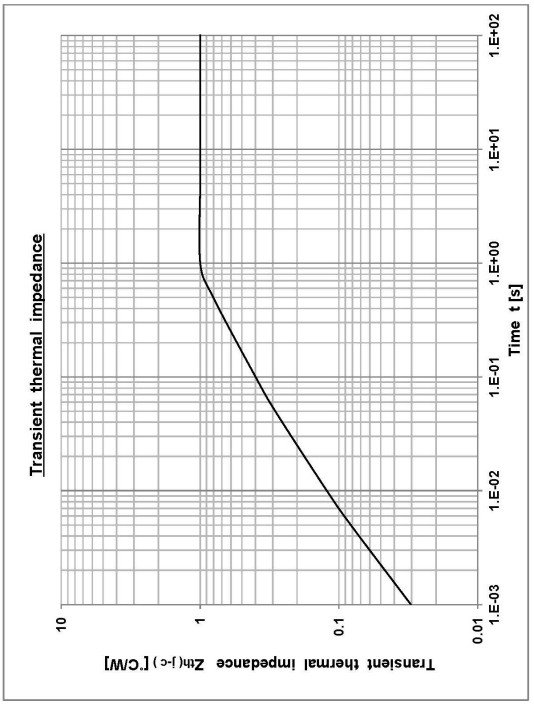
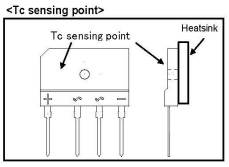




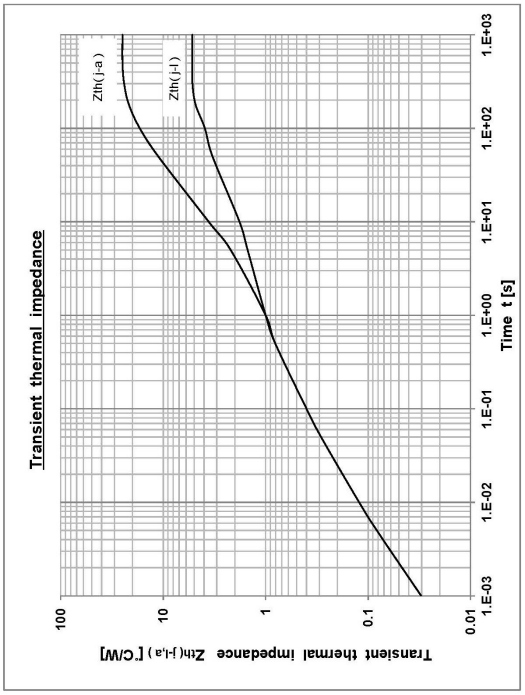




<Tc sensing point>



Specification No.



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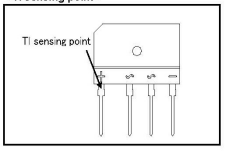

●Substrate detail

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Size	90mm×150mm
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Conductor thickness	35μm
Pattern area	1107 mm^2

Specification No.

Outline Dimensions

unit:mm

Notes

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