ShinDengen

D25XB60

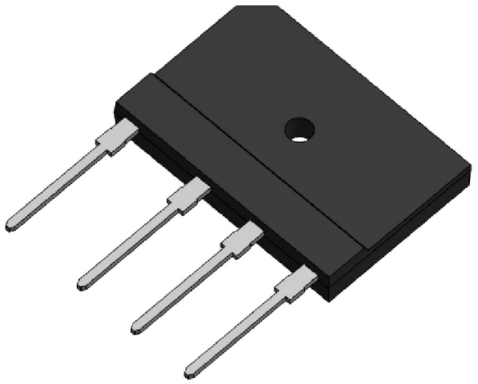
Bridge Diodes
600V, 25A

Feature

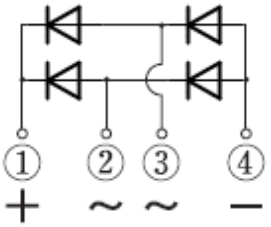
- Compact SIP
- UL E142422
- Pb free terminal
- RoHS:Yes

OUTLINE

Package (House Name): 5S



Equivalent circuit



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

Item	Symbol	Conditions	Ratings	Unit
Storage temperrature	Tstg		-40 to 150	°C
Junction temperature	Tj		-40 to 150	°C
Repetitive peak reverse voltage	V_{RRM}		600	V
Average forward current	I_F(AV)	50Hz sine wave, Resistance load, With heatsink, Tc=98°C	25	A
Average forward current	I_F(AV)	50Hz sine wave, Resistance load, On glass-epoxy substrate, Ta=25°C ※	3.5	A
Surge forward current	I_{FSM}	50Hz sine wave, Non-repetitive 1 cycle peak value, Tj=25°C	350	A
Current squared time	I^2t	1ms≦tp＜10ms, Tj=25°C, per diode	300	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

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

Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	V_F	IF=12.5A, Pulse measurement, per diode			1.05	V
Reverse current	I_R	VR=600V, Pulse measurement, per diode			10	μA
Thermal resistance	Rth(j-c)	Junction to case, With heatsink			1	°C/W
Thermal resistance	Rth(j-l)	Junction to lead, On glass-epoxy substrate ※			5	°C/W
Thermal resistance	Rth(j-a)	Junction to ambient, On glass-epoxy substrate ※			22	°C/W

※ ：See the original Specifications

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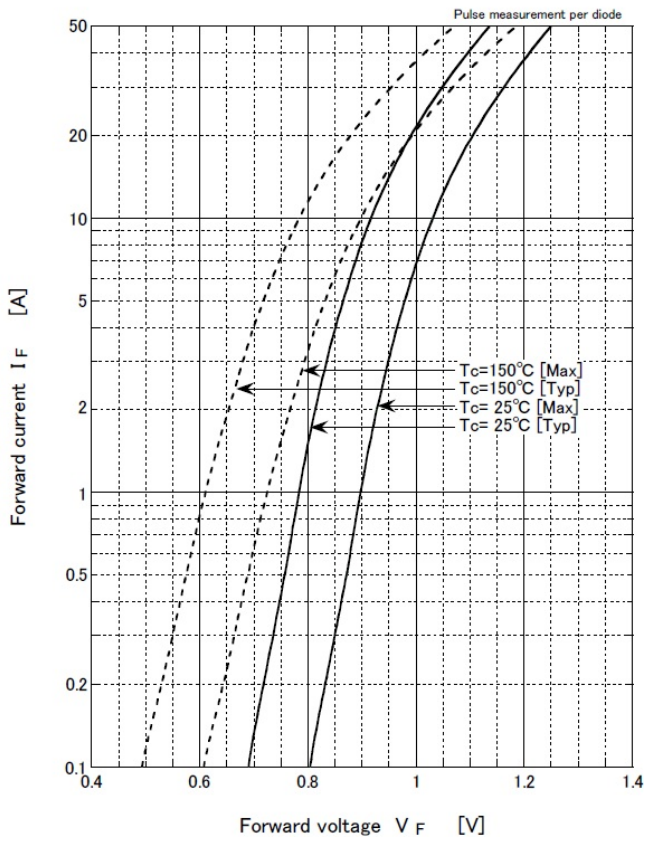
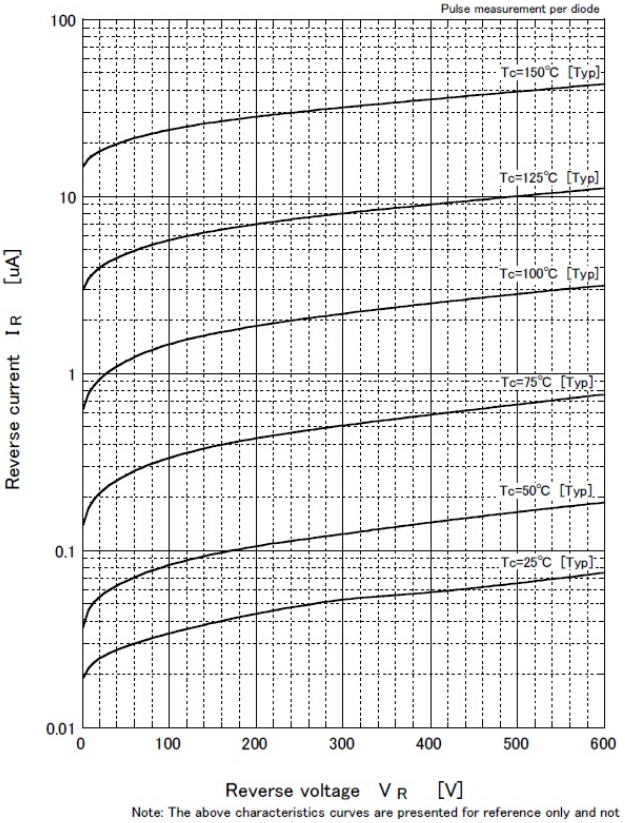
CHARACTERISTIC DIAGRAMS

Forward voltage

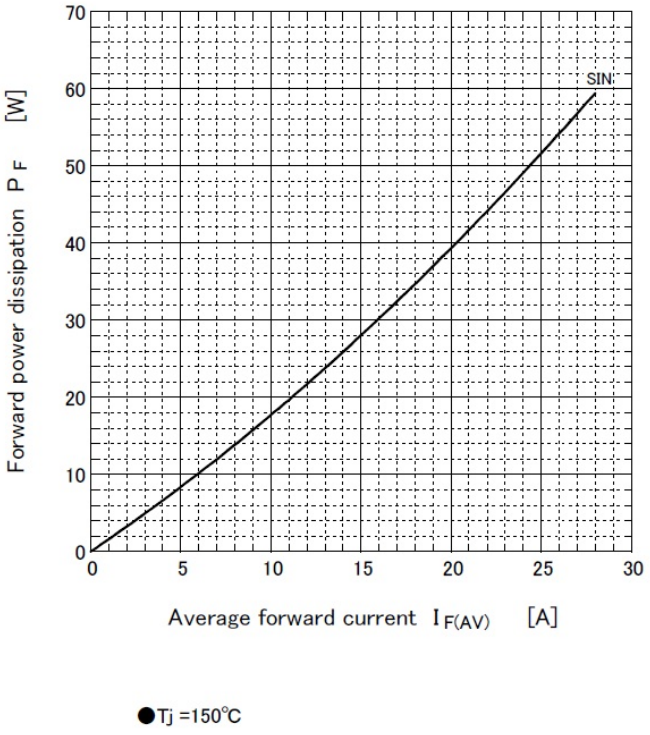


Reverse current



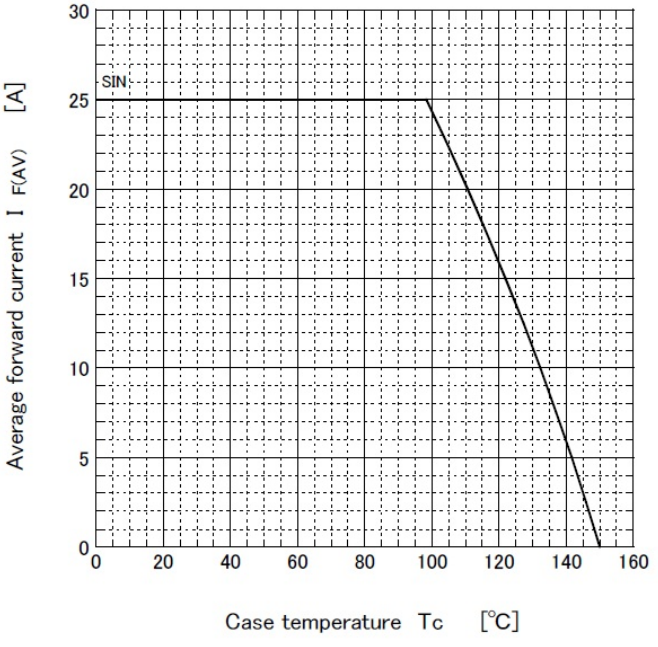
Note: The above characteristics curves are presented for reference only and not guaranteed by production test,unless otherwise noted.

Forward power dissipation



●Tj =150℃

Derating curve



●V_R = 600V
R-load
With heatsink

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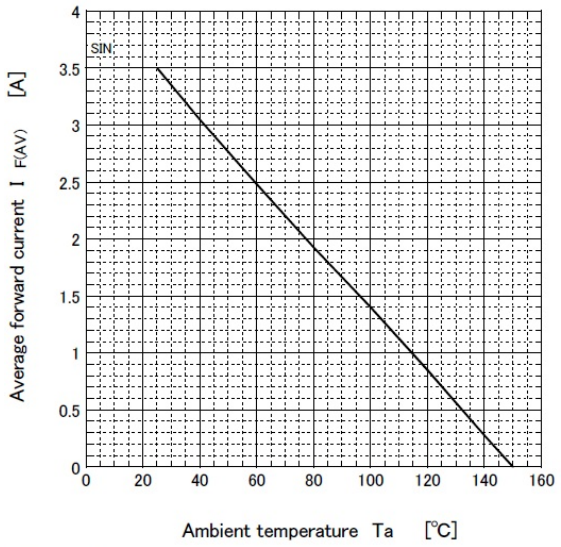
Derating curve

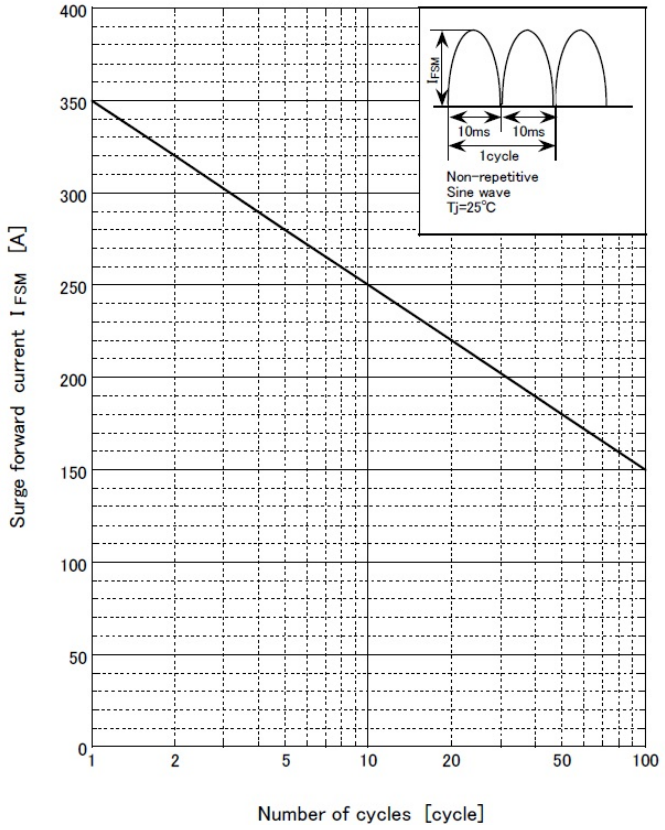


●V_R = 600V
R-load
Free in air

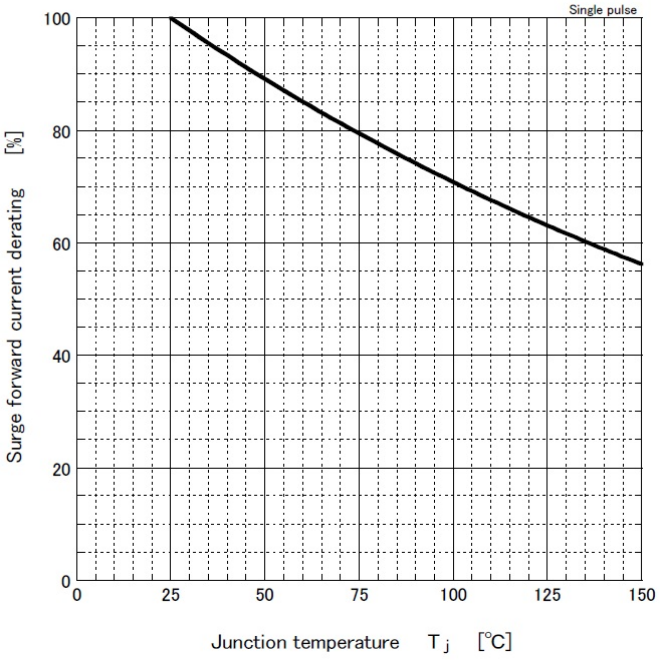
●Substrate detail

Type	Glass-epoxy
Size	90mm×150mm
Thickness	1mm
Conductor thickness	35μm
Pattern area	1107mm²

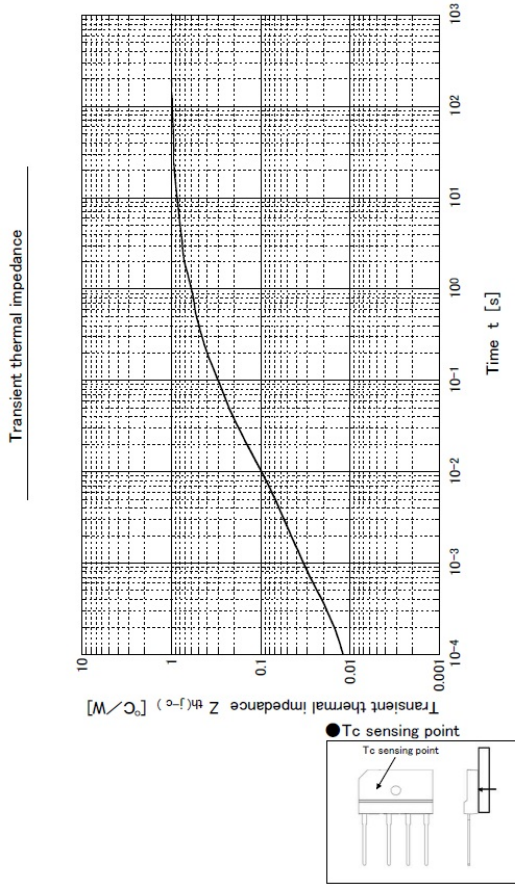
Surge forward current capability



Surge forward current derating vs Junction temperature



Transient thermal impedance



●Tc sensing point

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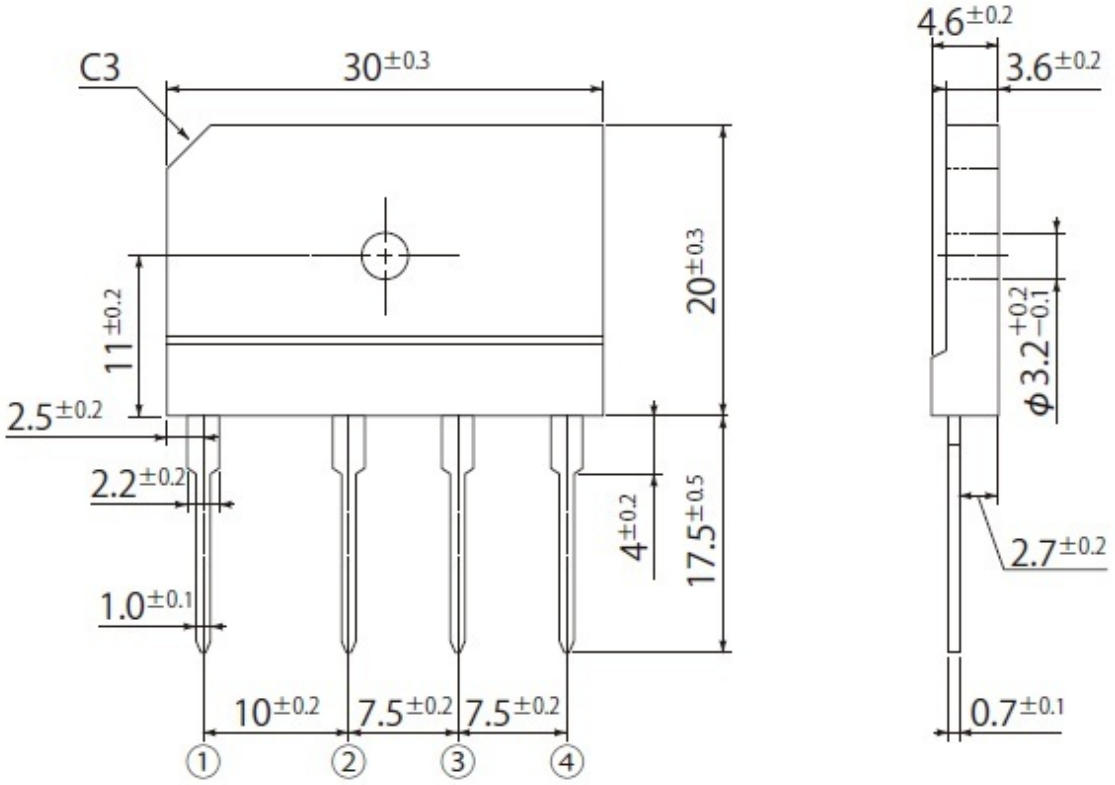
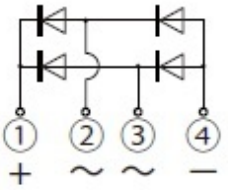
Outline Dimensions

unit:mm

D4

JEDEC Code	–
JEITA Code	–
House Name	5S





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U182-2(2026.09)

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