ShinDengen

LN15XB60

Bridge Diodes
600V, 15A

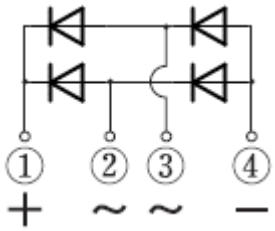
Feature

- Compact SIP
- Low Noise
- Low V_F
- Pb free terminal
- RoHS:Yes

OUTLINE

Package (House Name): 5S

Equivalent circuit



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

Item	Symbol	Conditions	Ratings	Unit
Storage temperrature	Tstg		-55 to 150	℃
Junction temperature	Tj		150	℃
Repetitive peak reverse voltage	V_{RRM}		600	V
Average forward current	I_F(AV)	50Hz sine wave, Resistance load, With heatsink, Tc=100℃	15	A
Average forward current	I_F(AV)	50Hz sine wave, Resistance load, Without heatsink Ta=25℃	3	A
Surge forward current	I_{FSM}	50Hz sine wave, Non-repetitive 1 cycle peak value, Tj=25℃	200	A
Current squared time	I^2t	1ms≦t＜10ms, Tj=25℃, per diode	90	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

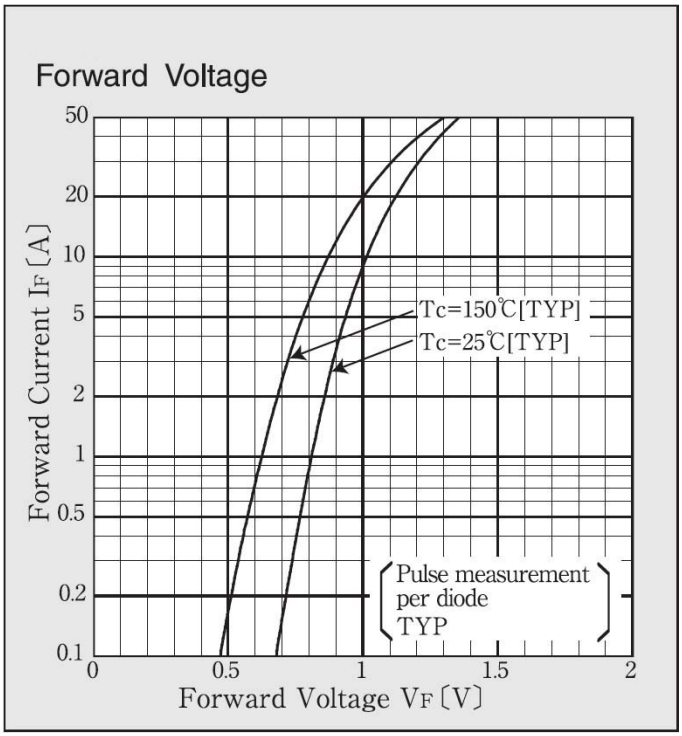
Electrical Characteristics (unless otherwise specified : Tc=25°C)

Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	V_F	IF=7.5A, Pulse measurement, per diode			1.1	V
Reverse current	I_R	VR=600V, Pulse measurement, per diode			10	μA
Reverse recovery time	trr	IF=0.1A, IR=0.1A, per diode			5000	ns
Thermal resistance	Rth(j-c)	Junction to case, With heatsink			1.5	°C/W
Thermal resistance	Rth(j-l)	Junction to lead, Without heatsink			5	°C/W
Thermal resistance	Rth(j-a)	Junction to ambient, Without heatsink			23	°C/W

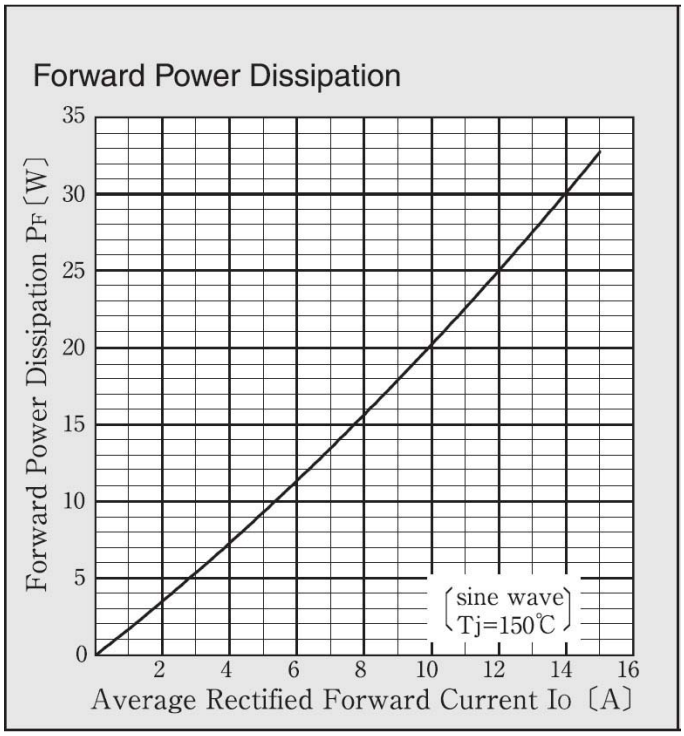
※ :See the original Specifications

CHARACTERISTIC DIAGRAMS

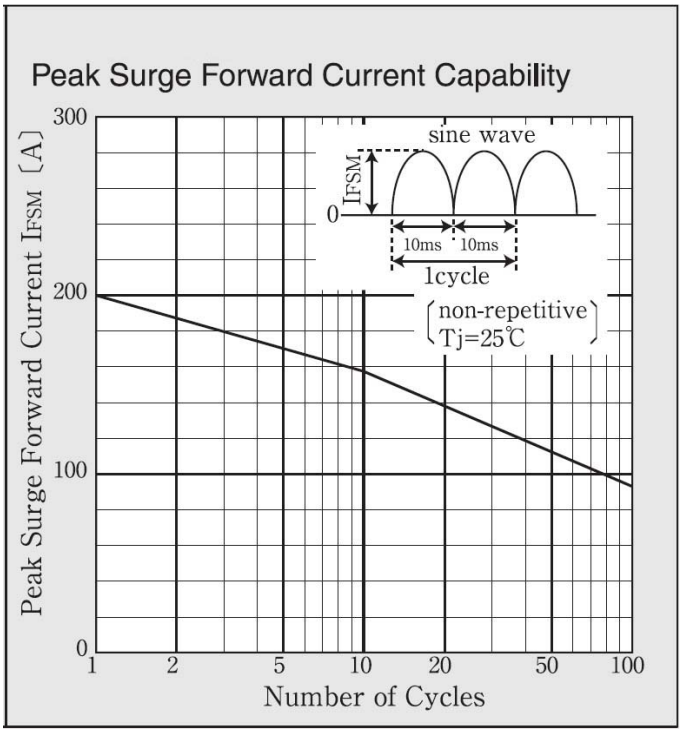
Forward Voltage



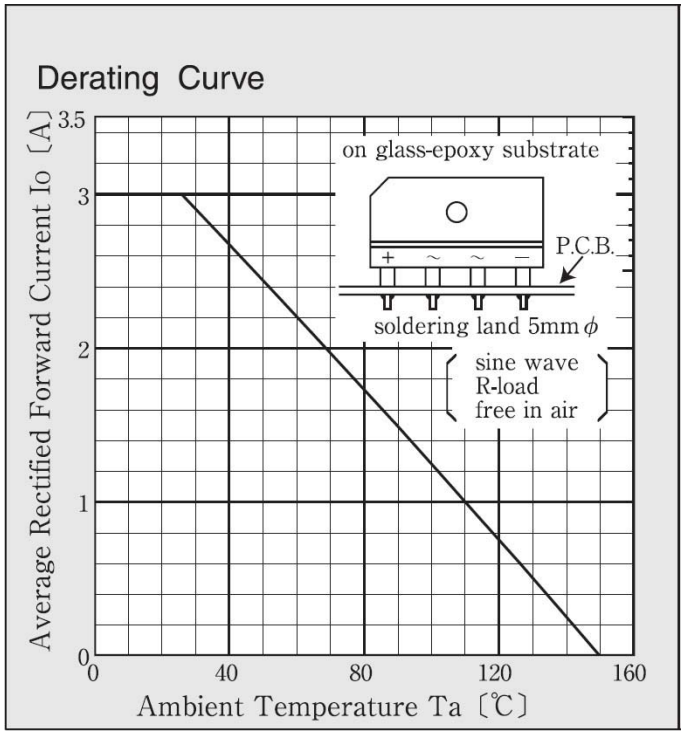
Forward Power Dissipation

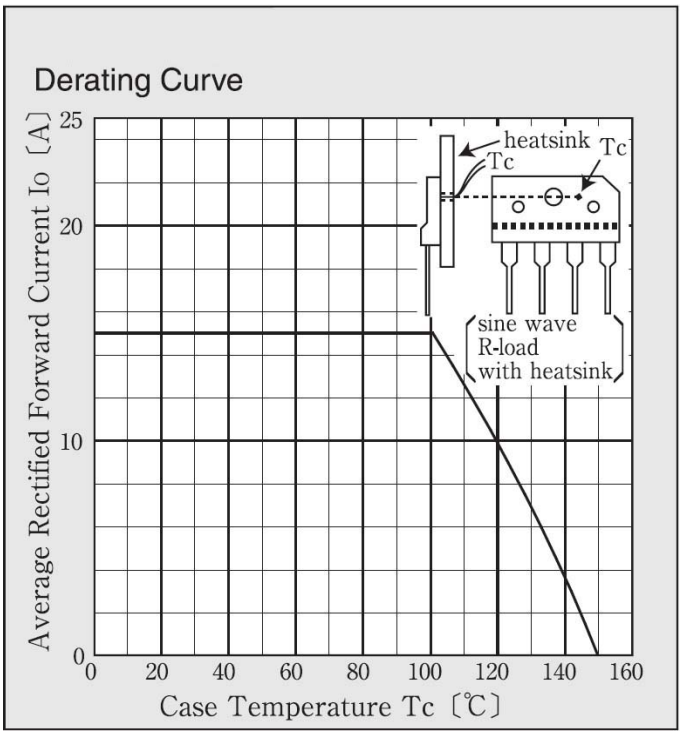


Peak Surge Forward Current Capability



Derating Curve




Derating Curve
Average Rectified Forward Current Io〔A〕
25
20
10
0
0
20
40
60
80
100
120
140
160
Case Temperature Tc〔℃〕
heatsink Tc
Tc
sine wave
R-load
with heatsink

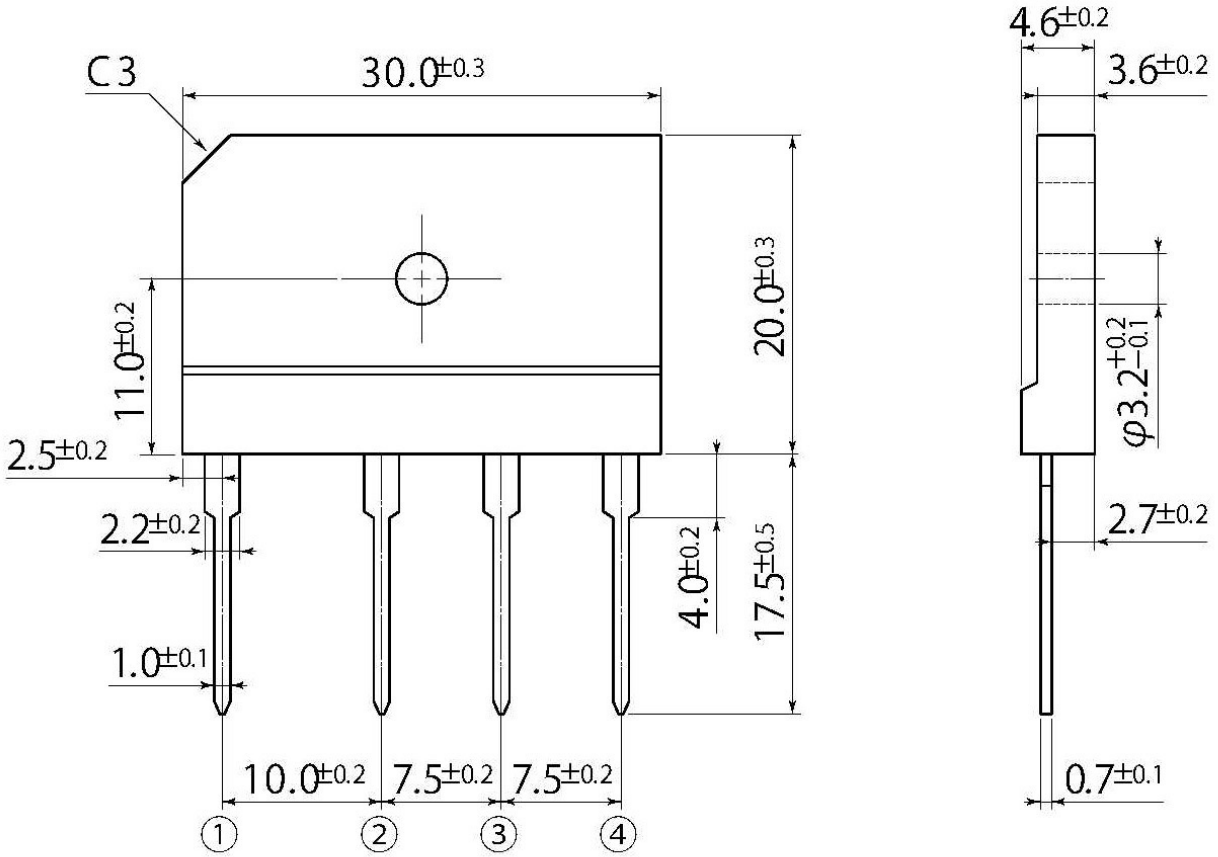
Outline Dimensions

unit:mm

scale: 2/1

D4

JEDEC Code	–
JEITA Code	–
House Name	5S



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