

LN15XB60H

Bridge Diodes

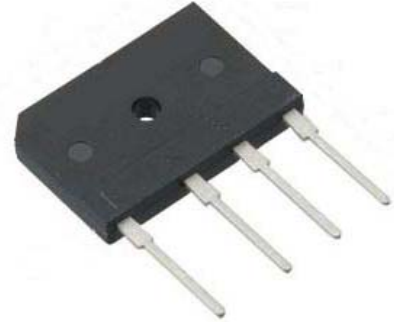
600V, 15A

Feature

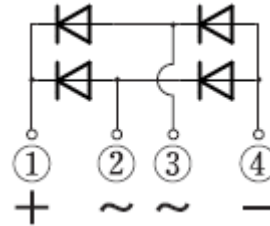
- Compact SIP
- Low Noise
- Low V_F
- High I_{FSM}
- Pb free terminal
- RoHS:Yes

OUTLINE

Package (House Name): 5S



Equivalent circuit



Absolute Maximum Ratings (unless otherwise specified : $T_c=25^\circ\text{C}$)

Item	Symbol	Conditions	Ratings	Unit
Storage temperature	T_{stg}		-55 to 150	$^\circ\text{C}$
Junction temperature	T_j		150	$^\circ\text{C}$
Repetitive peak reverse voltage	V_{RRM}		600	V
Average forward current	$I_F(AV)$	50Hz sine wave, Resistance load, With heatsink, $T_c=106^\circ\text{C}$	15	A
Average forward current	$I_F(AV)$	50Hz sine wave, Resistance load, Without heatsink $T_a=28^\circ\text{C}$	3.3	A
Surge forward current	I_{FSM}	50Hz sine wave, Non-repetitive 1 cycle peak value, $T_j=25^\circ\text{C}$	290	A
Current squared time	I^2t	$1\text{ms} \leq t < 10\text{ms}$, $T_j=25^\circ\text{C}$, per diode	200	A^2s
Dielectric strength	V_{dis}	Terminals to case, AC 1 minute	2.5	kV
Mounting torque	TOR	(Recommended torque : $0.5\text{N}\cdot\text{m}$)	0.8	$\text{N}\cdot\text{m}$

※ : See the original Specifications

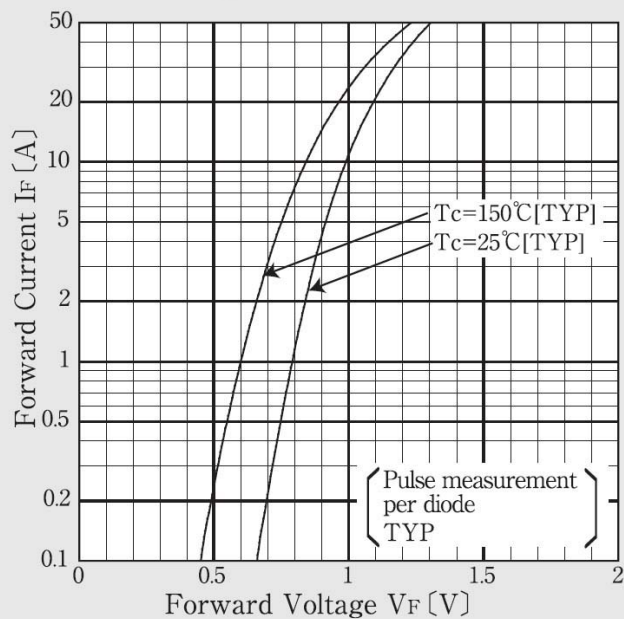
Electrical Characteristics (unless otherwise specified : Tc=25°C)

Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	V_F	IF=7.5A, Pulse measurement, per diode			1.05	V
Reverse current	I_R	VR=600V, Pulse measurement, per diode			10	μ A
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	$^{\circ}$ C/W
Thermal resistance	Rth(j-l)	Junction to lead, Without heatsink			5	$^{\circ}$ C/W
Thermal resistance	Rth(j-a)	Junction to ambient, Without heatsink			23	$^{\circ}$ C/W

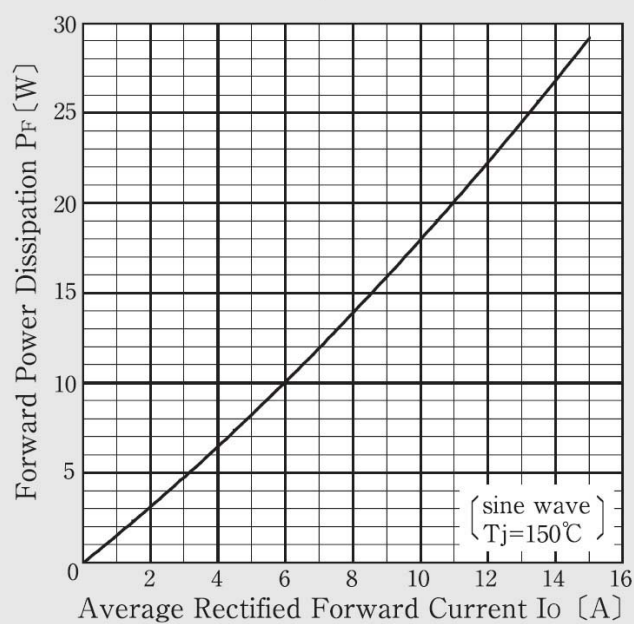
* :See the original Specifications

CHARACTERISTIC DIAGRAMS

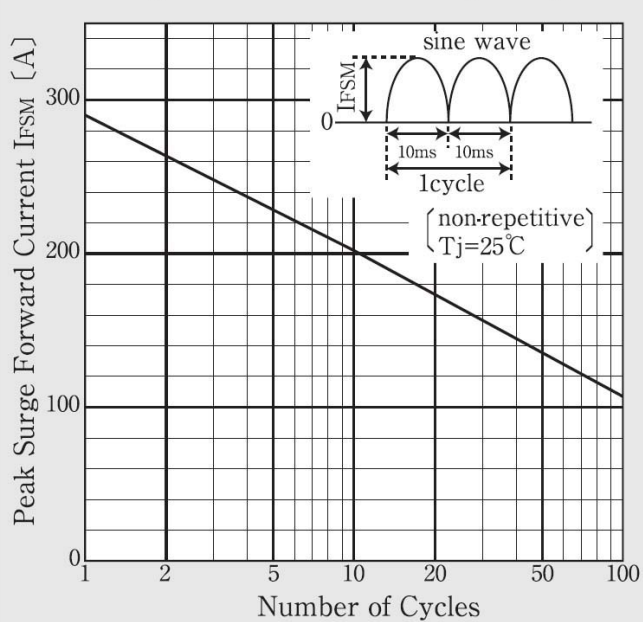
Forward Voltage



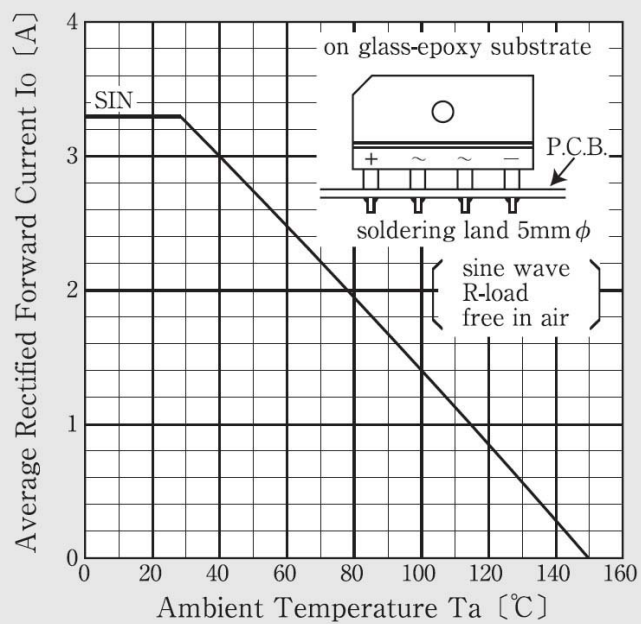
Forward Power Dissipation



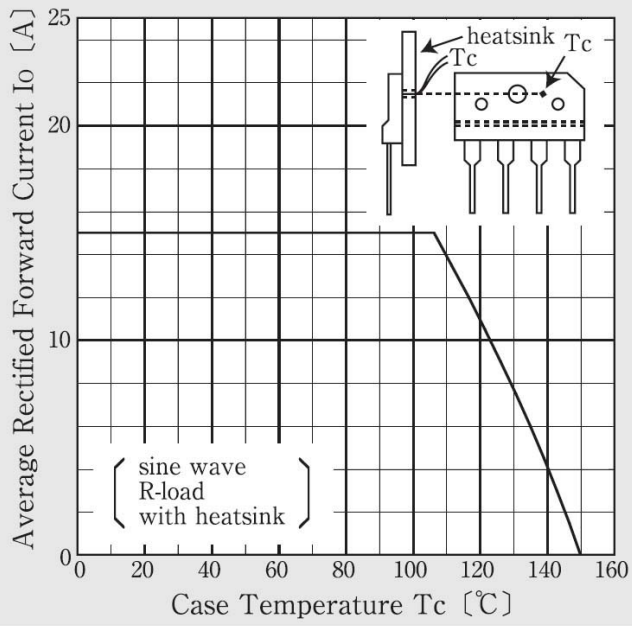
Peak Surge Forward Current Capability



Derating Curve



Derating Curve



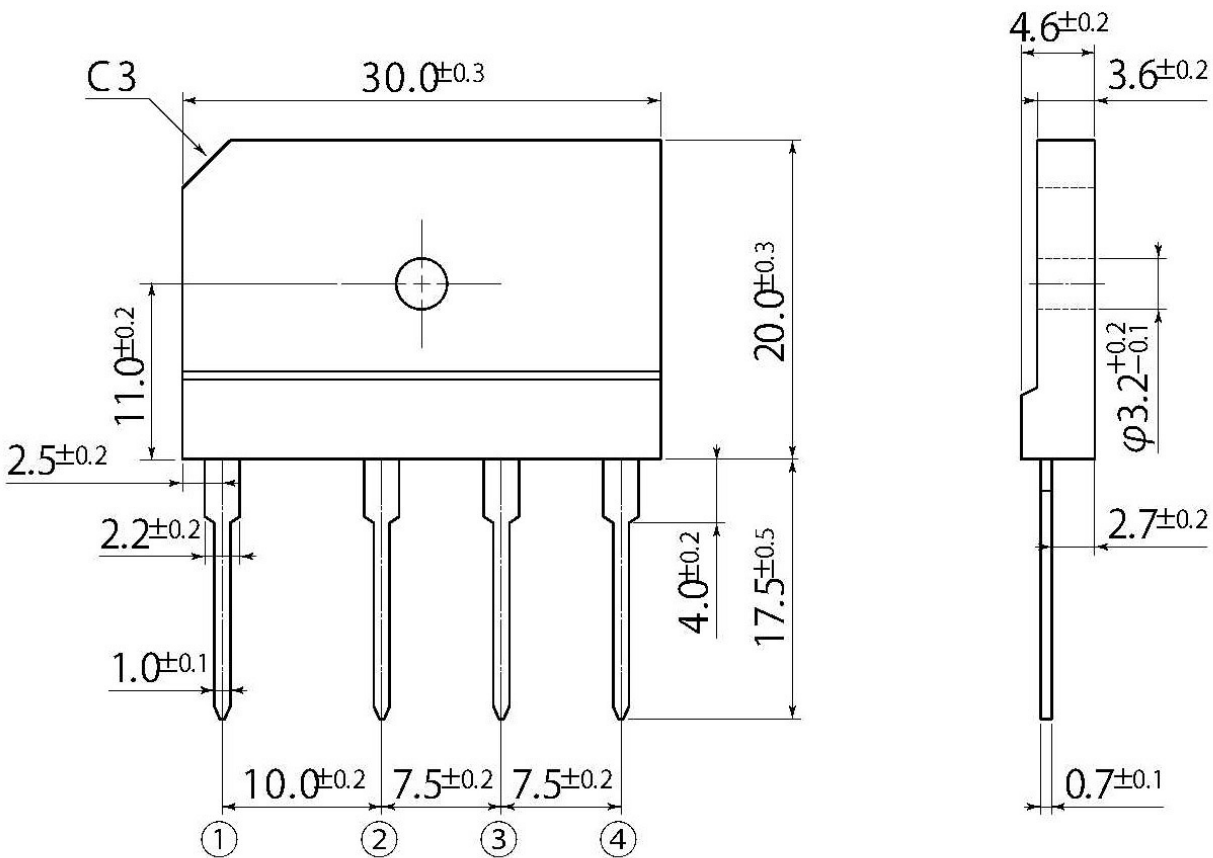
Outline Dimensions

unit:mm

scale: 2/1

D4

JEDEC Code	—
JEITA Code	—
House Name	5S



Notes

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