

LL25XB60

Bridge Diodes
600V, 25A

Feature

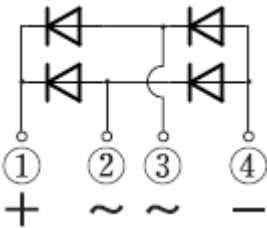
- Compact SIP
- Low Noise
- Low V_F
- UL E142422
- Pb free terminal
- RoHS:Yes

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		-55 to 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, $T_c=113^{\circ}\text{C}$	25	A
Average forward current	$I_F(AV)$	50Hz sine wave, Resistance load, On glass-epoxy substrate, $T_a=25^{\circ}\text{C}$ ※	3.6	A
Surge forward current	I_{FSM}	50Hz sine wave, Non-repetitive 1 cycle peak value, $T_j=25^{\circ}\text{C}$	300	A
Surge forward current	I_{FSM1}	$t_p=1\text{ms}$, sine wave, Non-repetitive, peak value, per diode, $T_j=25^{\circ}\text{C}$	945	A
Current squared time	I^2t	$1\text{ms} \leq t_p < 10\text{ms}$, $T_j=25^{\circ}\text{C}$, per diode	450	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

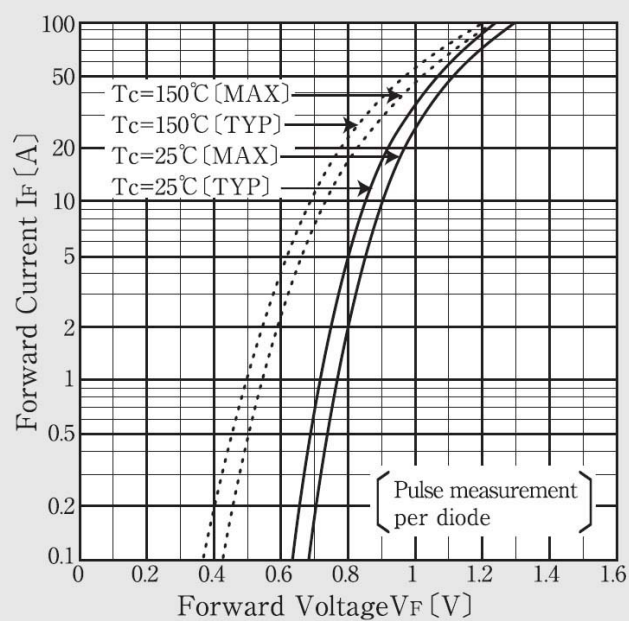
Electrical Characteristics (unless otherwise specified : Tc=25°C)

Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	V_F	$I_F=12.5A$, Pulse measurement, per diode		0.87	0.92	V
Reverse current	I_R	$V_R=600V$, Pulse measurement, per diode			10	μA
Reverse recovery time	t_{rr}	$I_F=0.1A$, $I_R=0.1A$, $0.1I_R$, per diode			3000	ns
Thermal resistance	$R_{th(j-c)}$	Junction to case, With heatsink			0.8	$^{\circ}C/W$
Thermal resistance	$R_{th(j-l)}$	Junction to lead, On glass-epoxy substrate ※			5	$^{\circ}C/W$
Thermal resistance	$R_{th(j-a)}$	Junction to ambient, On glass-epoxy substrate ※			25	$^{\circ}C/W$

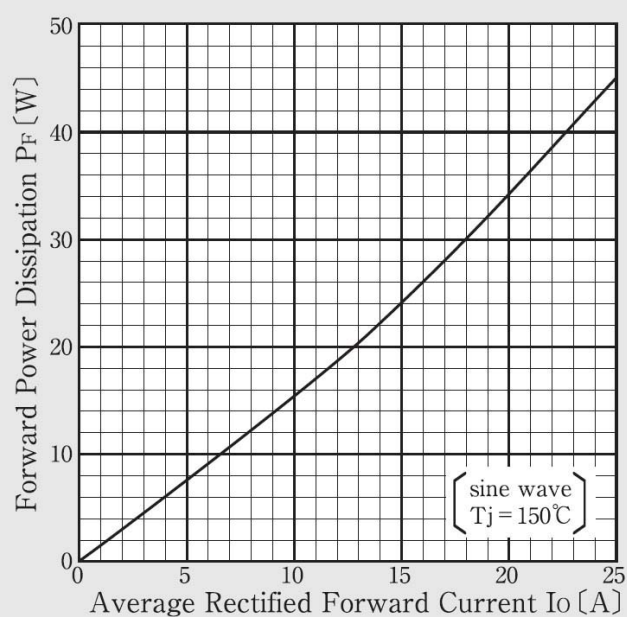
※ :See the original Specifications

CHARACTERISTIC DIAGRAMS

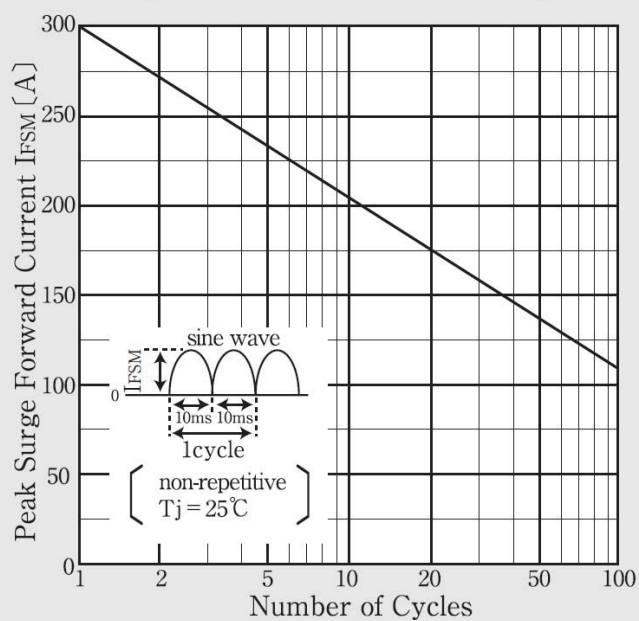
Forward Voltage



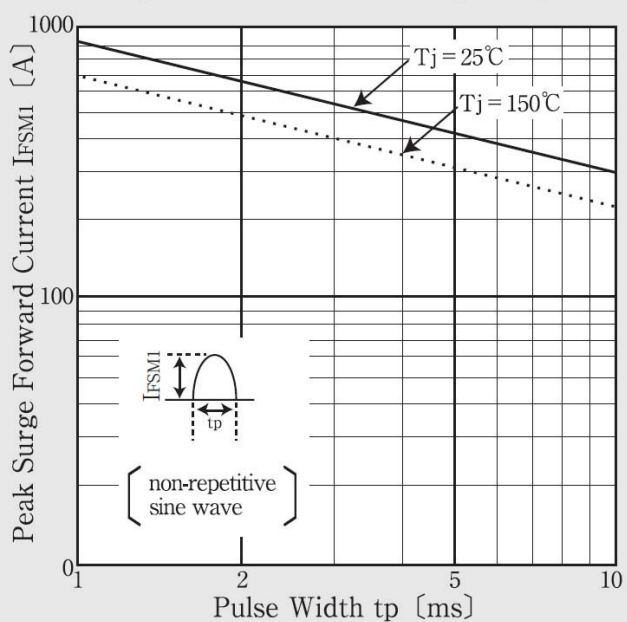
Forward Power Dissipation



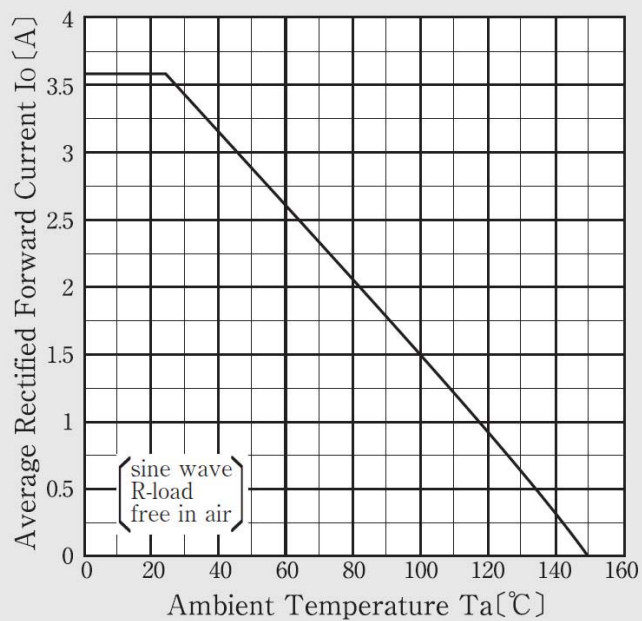
Peak Surge Forward Current Capability



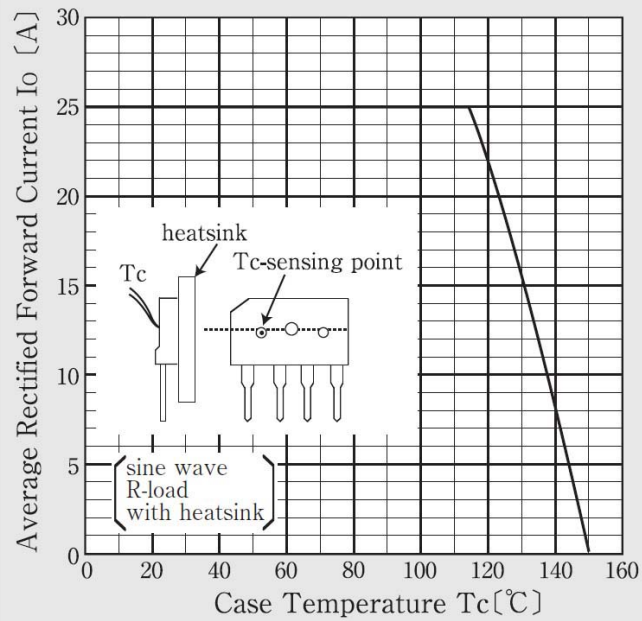
Peak Surge Forward Current Capability



Derating Curve



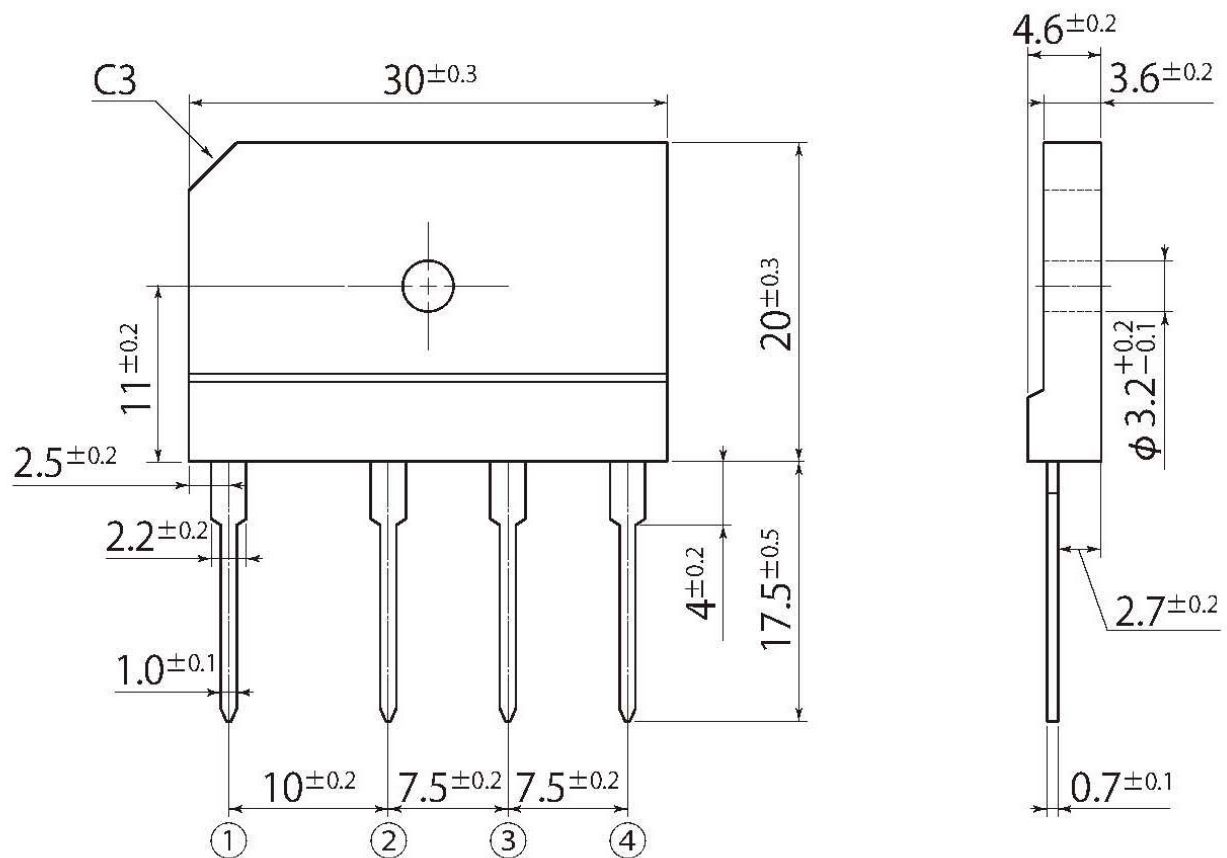
Derating Curve



unit:mm

D4

JEDEC Code	—
JEITA Code	—
House Name	5S



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