

D15XBS6

Bridge Diodes

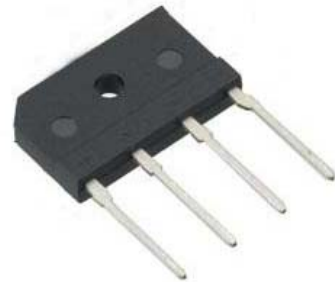
60V, 15A

Feature

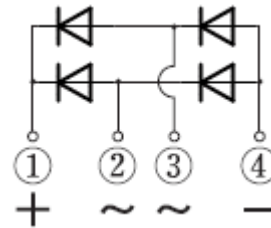
- Compact SIP
- SBD Bridge
- High Recovery Speed
- Low V_F
- Pb free terminal
- RoHS:Yes

OUTLINE

Package (House Name): 3S



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}		60	V
Non-repetitive peak reverse voltage	V_{RSM}	Pulse width 0.5ms, Duty 1/40	65	V
Average forward current	$I_F(AV)$	50Hz sine wave, Resistance load, With heatsink, $T_c=59^\circ\text{C}$	15	A
Average forward current	$I_F(AV)$	50Hz sine wave, Resistance load, Without heatsink, $T_a=25^\circ\text{C}$	2.1	A
Surge forward current	I_{FSM}	50Hz sine wave, Non-repetitive 1 cycle peak value, $T_j=25^\circ\text{C}$	150	A
Repetitive peak surge reverse power	P_{RRSM}	Pulse width 10 μs , per diode, $T_j=25^\circ\text{C}$	330	W
Dielectric strength	V_{dis}	Terminals to case, AC 1 minute	2	kV
Mounting torque	TOR	(Recommended torque : 0.5N·m)	0.8	N·m

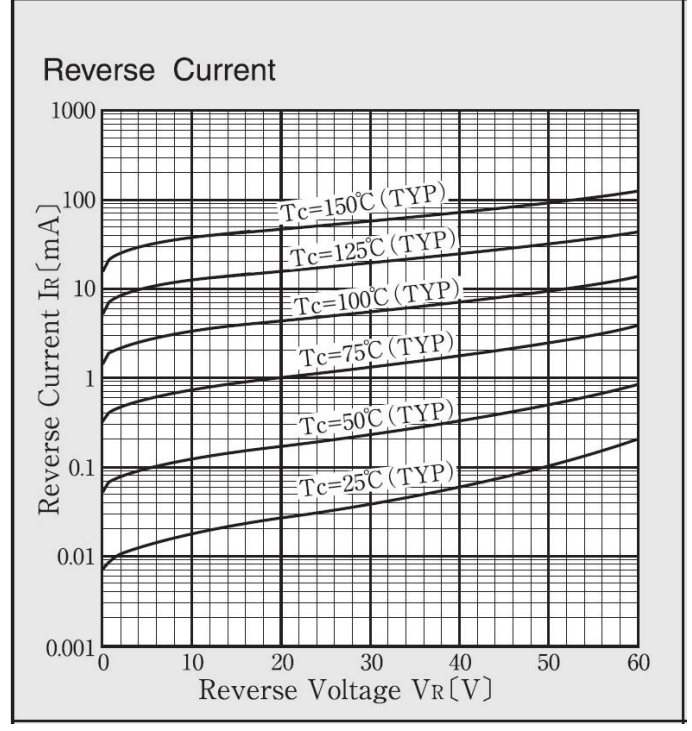
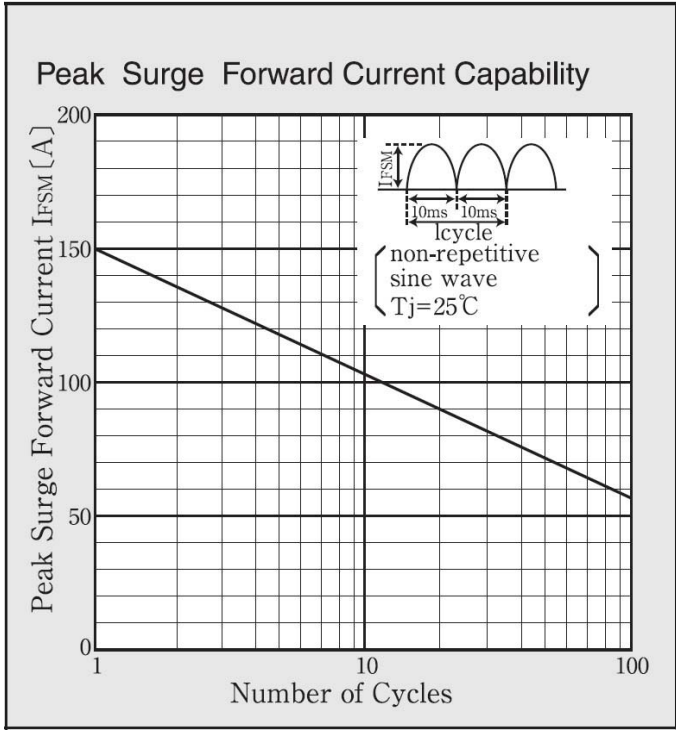
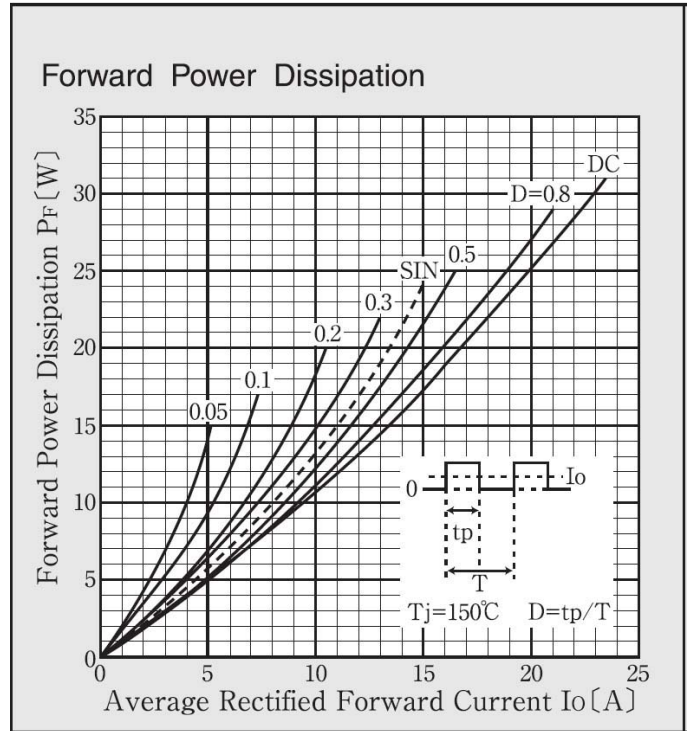
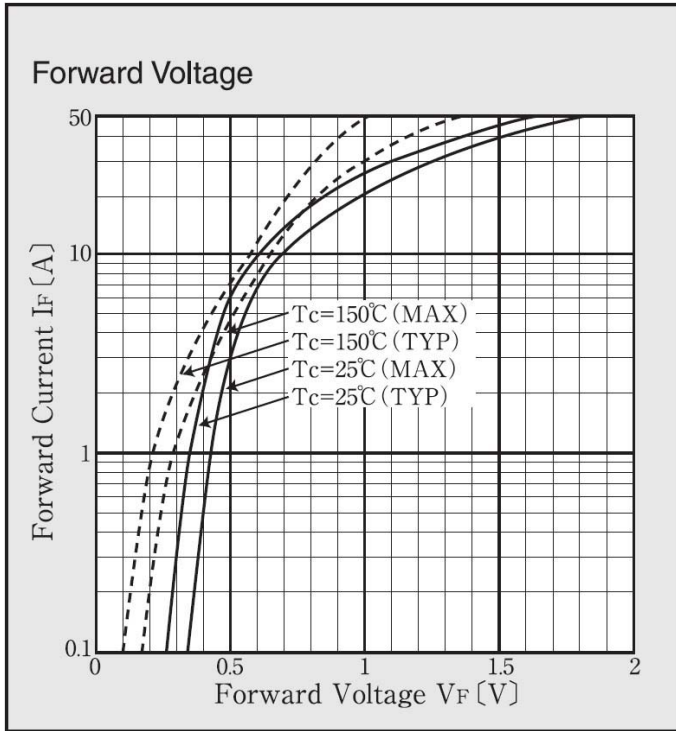
* : See the original Specifications

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

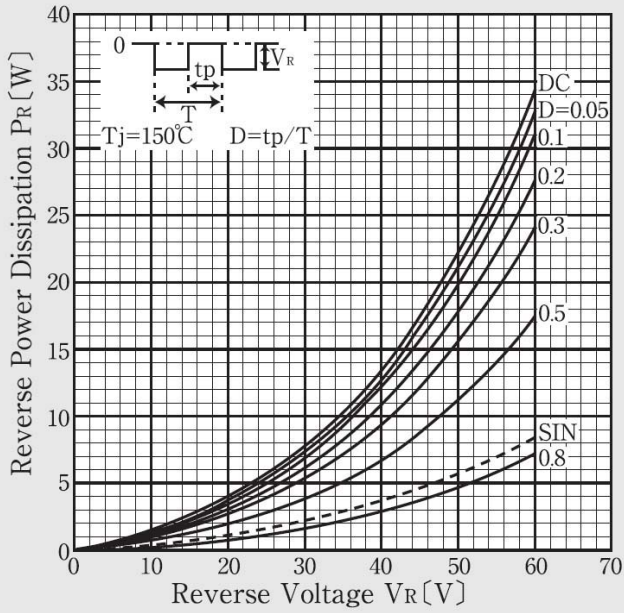
Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	V _F	I _F =7.5A, Pulse measurement, per diode			0.63	V
Reverse current	I _R	V _R =60V, Pulse measurement, per diode			6000	μA
Total capacitance	C _t	f=1MHz, V _R =10V, per diode		410		pF
Thermal resistance	R _{th(j-c)}	Junction to case, With heatsink			3.5	°C/W
Thermal resistance	R _{th(j-l)}	Junction to lead			6	°C/W
Thermal resistance	R _{th(j-a)}	Junction to ambient			30	°C/W

※ :See the original Specifications

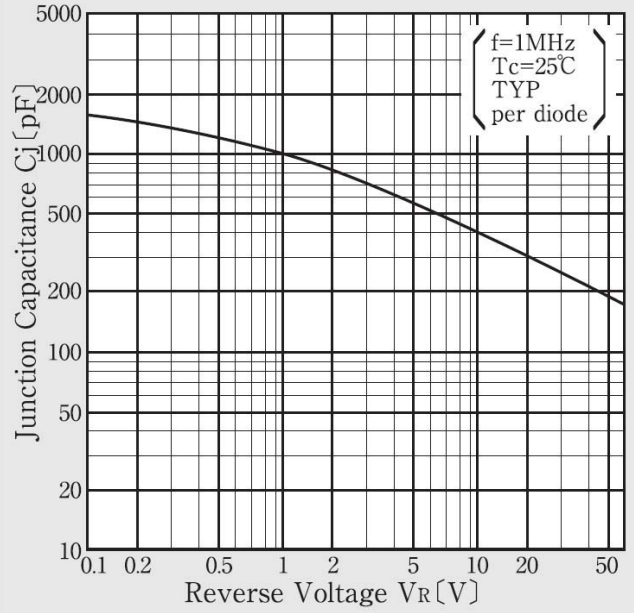
CHARACTERISTIC DIAGRAMS



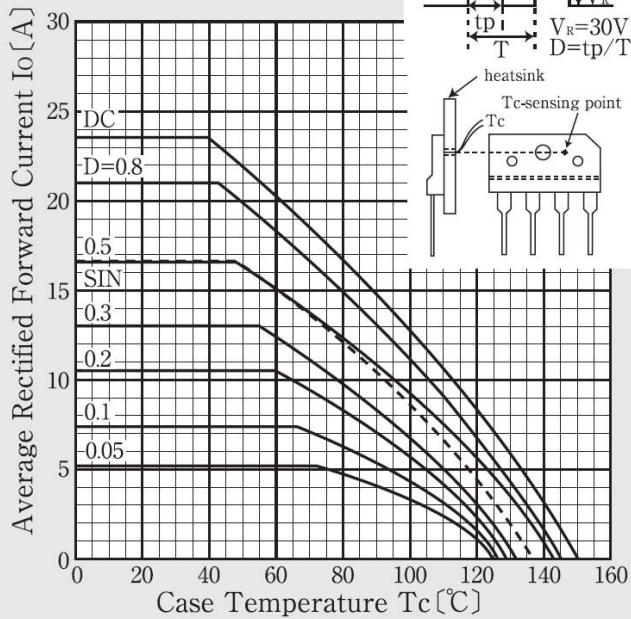
Reverse Power Dissipation



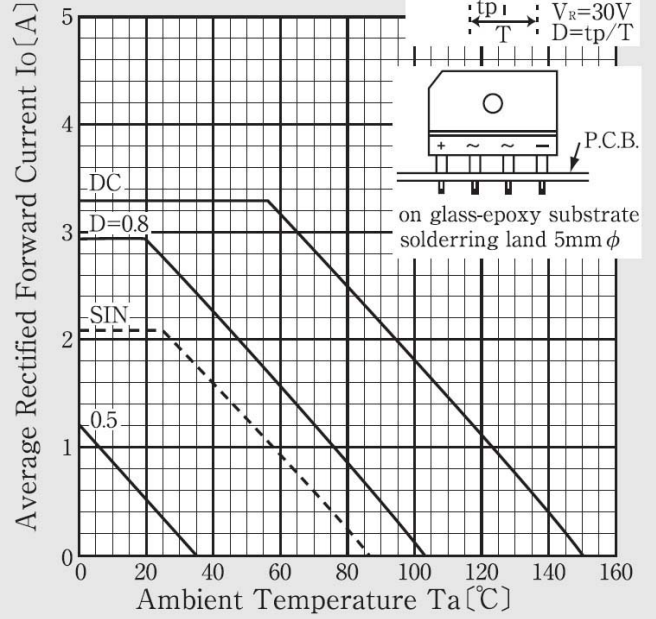
Junction Capacitance



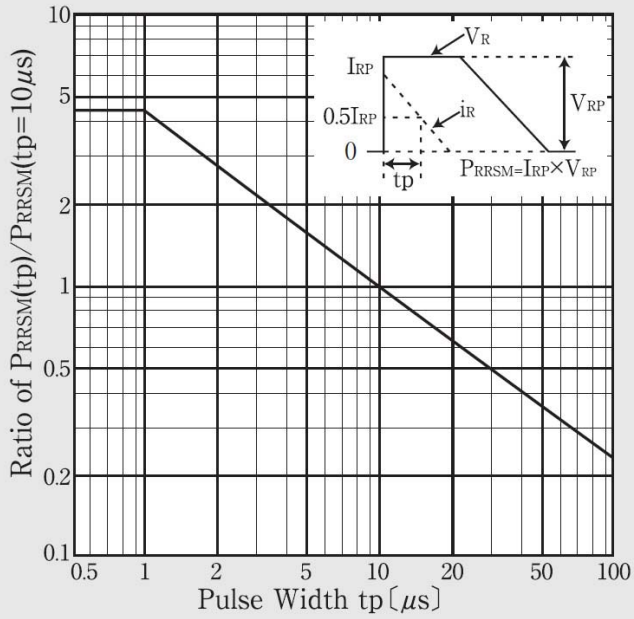
Derating Curve



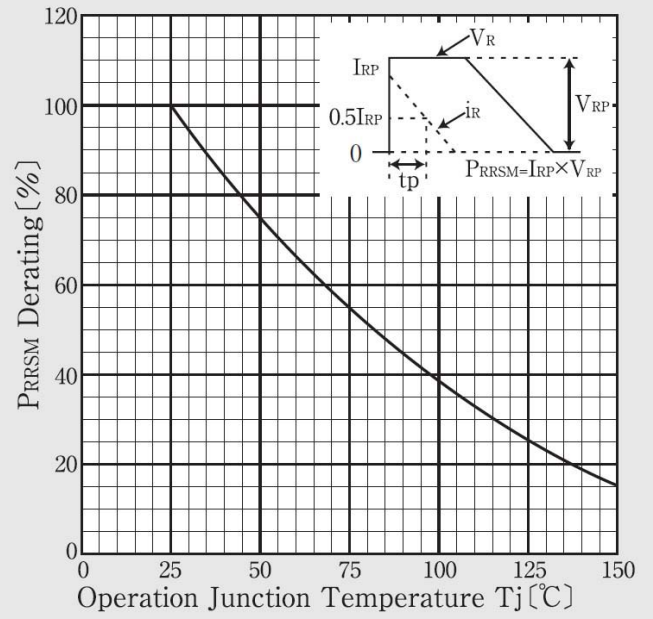
Derating Curve



Repetitive Surge Reverse Power Capability

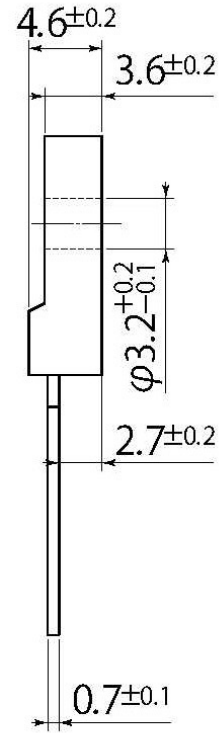
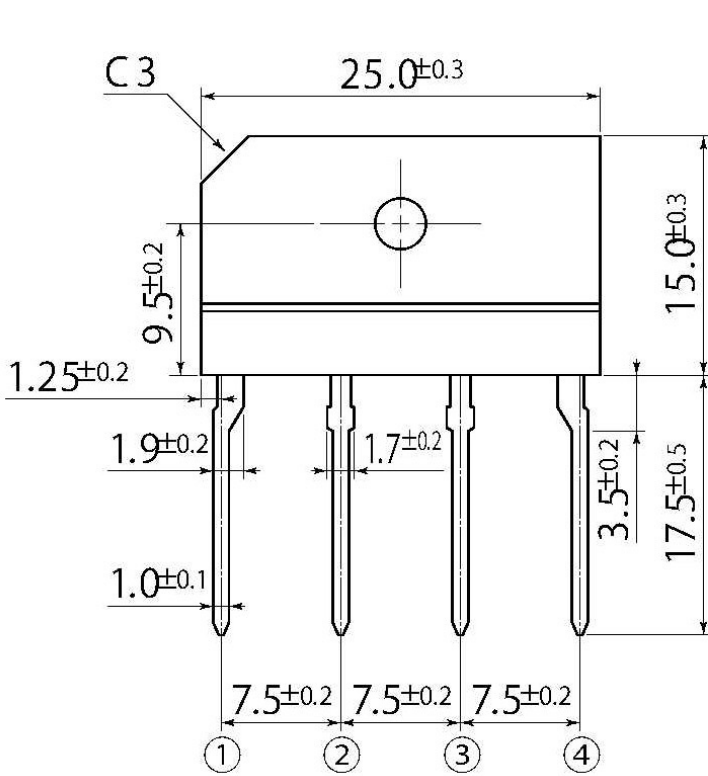


Repetitive Surge Reverse Power Derating Curve



D3

JEDEC Code	-
JEITA Code	-
House Name	3S



Notes

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