

# D15XBS6

## Bridge Diodes

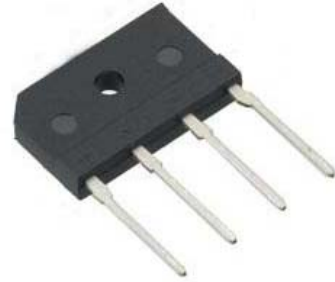
60V, 15A

### Feature

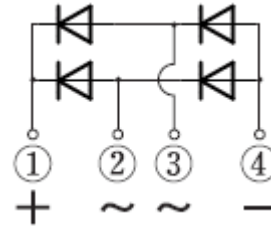
- Compact SIP
- SBD Bridge
- High Recovery Speed
- Low  $V_F$
- Pb free terminal
- RoHS:Yes

### 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 $\mu\text{s}$ , 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

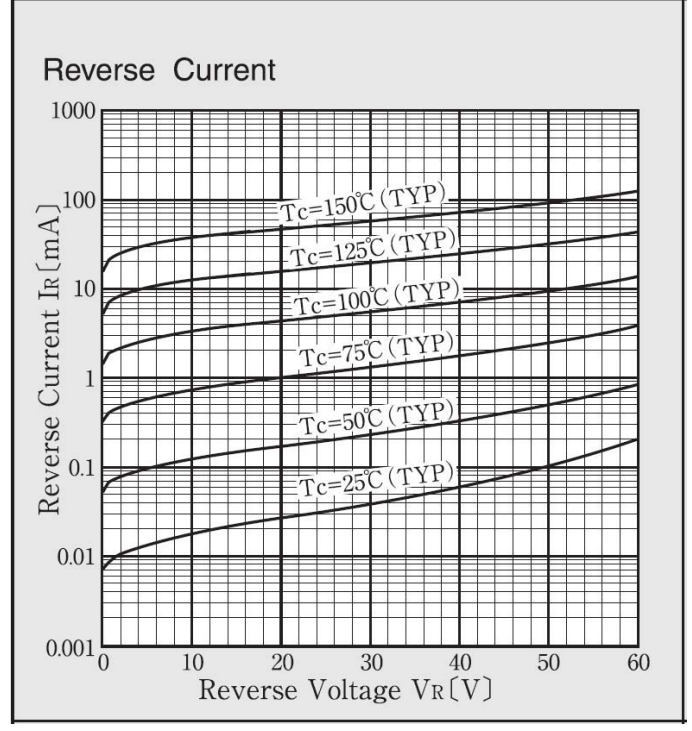
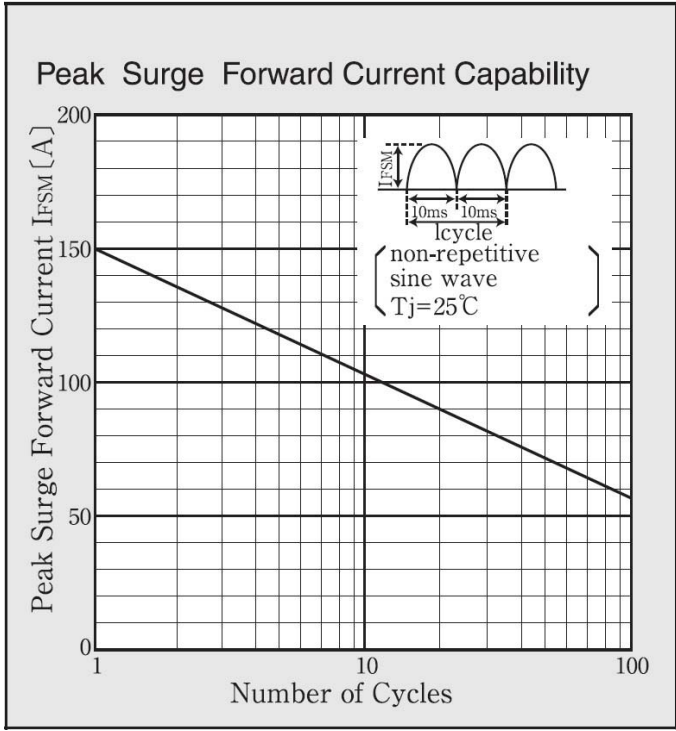
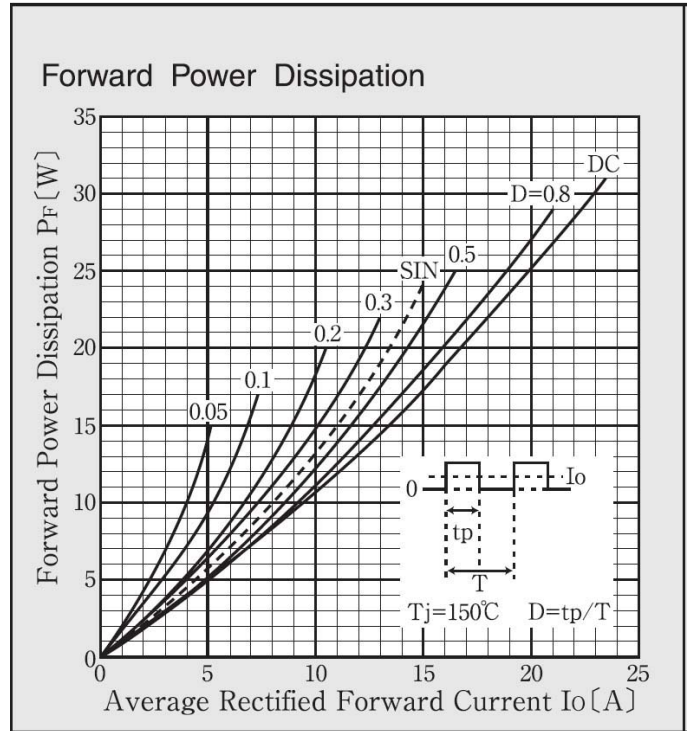
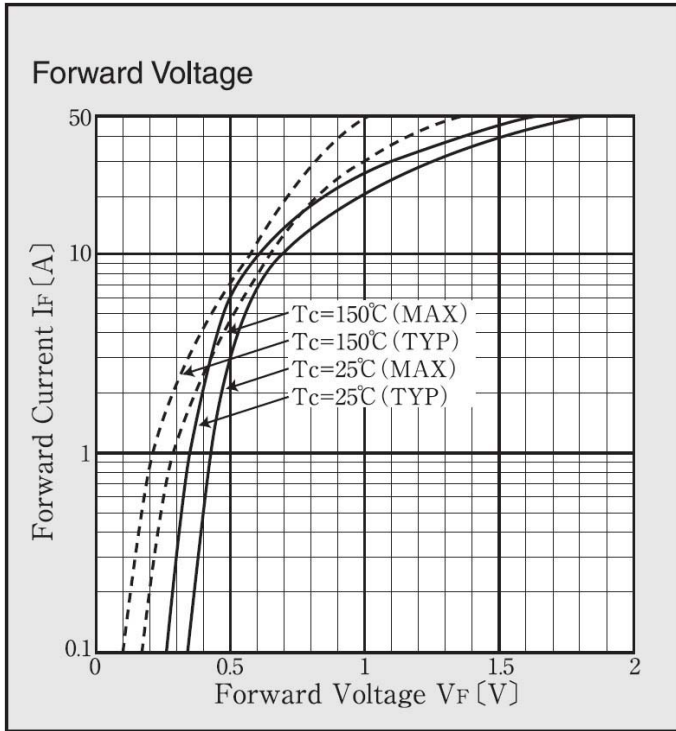
\* : See the original Specifications

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

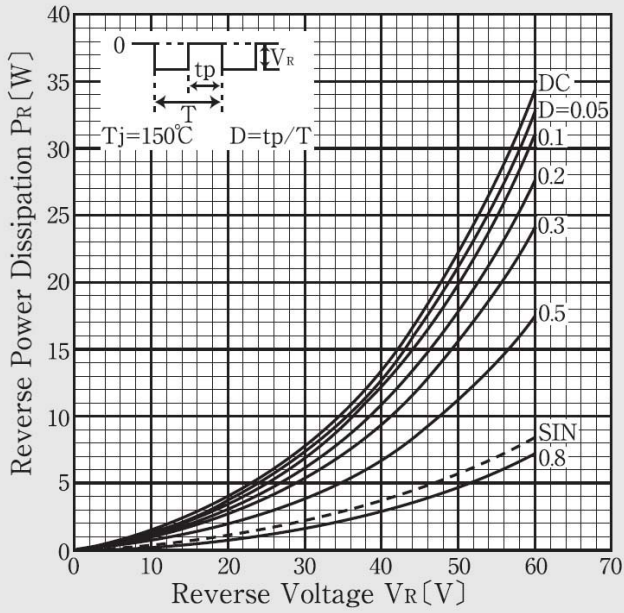
Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	V <sub>F</sub>	I <sub>F</sub> =7.5A, Pulse measurement, per diode			0.63	V
Reverse current	I <sub>R</sub>	V <sub>R</sub> =60V, Pulse measurement, per diode			6000	μA
Total capacitance	C <sub>t</sub>	f=1MHz, V <sub>R</sub> =10V, per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

\* :See the original Specifications

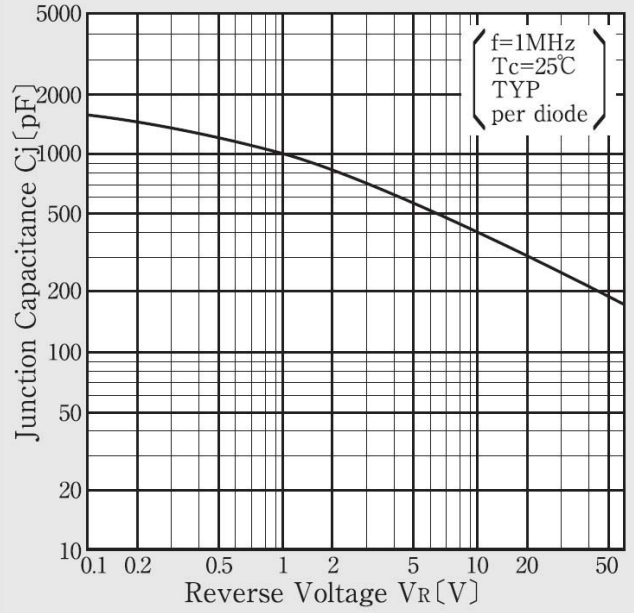
# CHARACTERISTIC DIAGRAMS



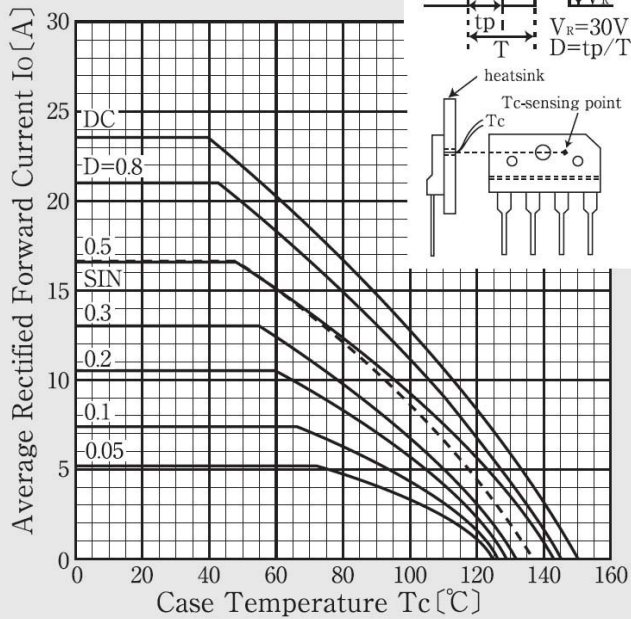
### Reverse Power Dissipation



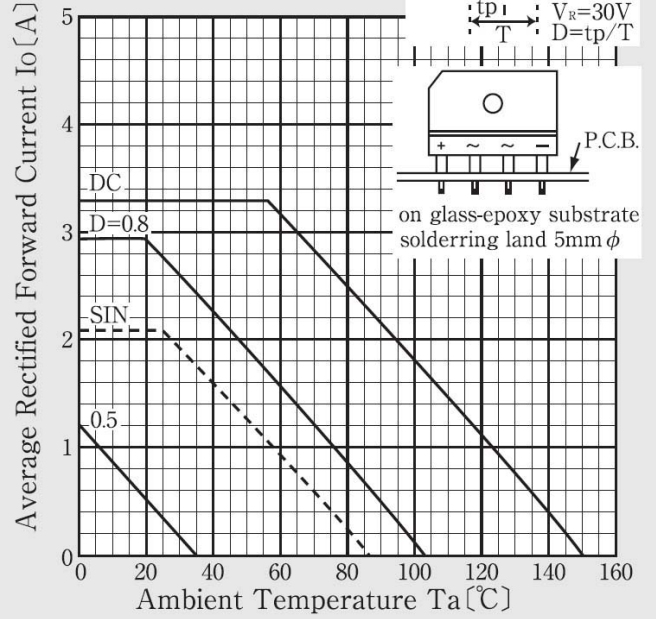
### Junction Capacitance



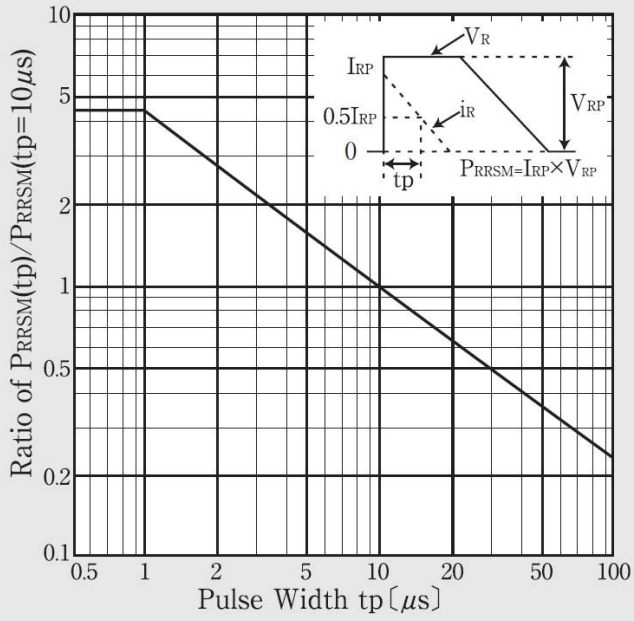
### Derating Curve



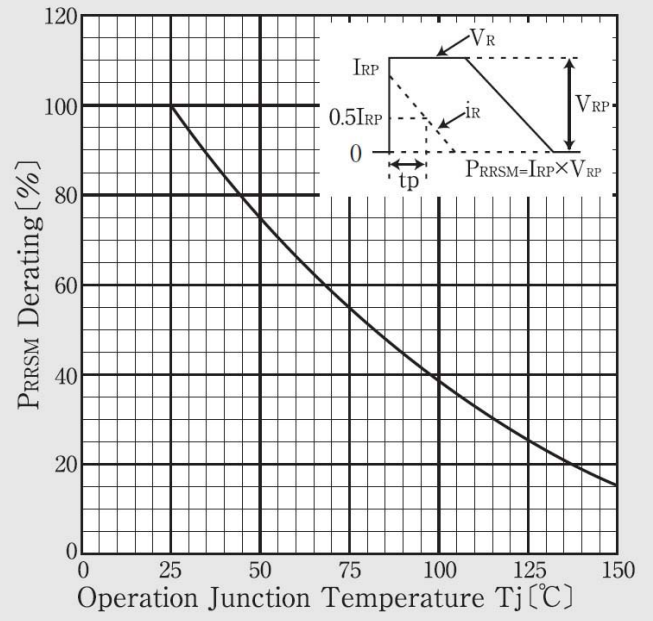
### Derating Curve



### Repetitive Surge Reverse Power Capability

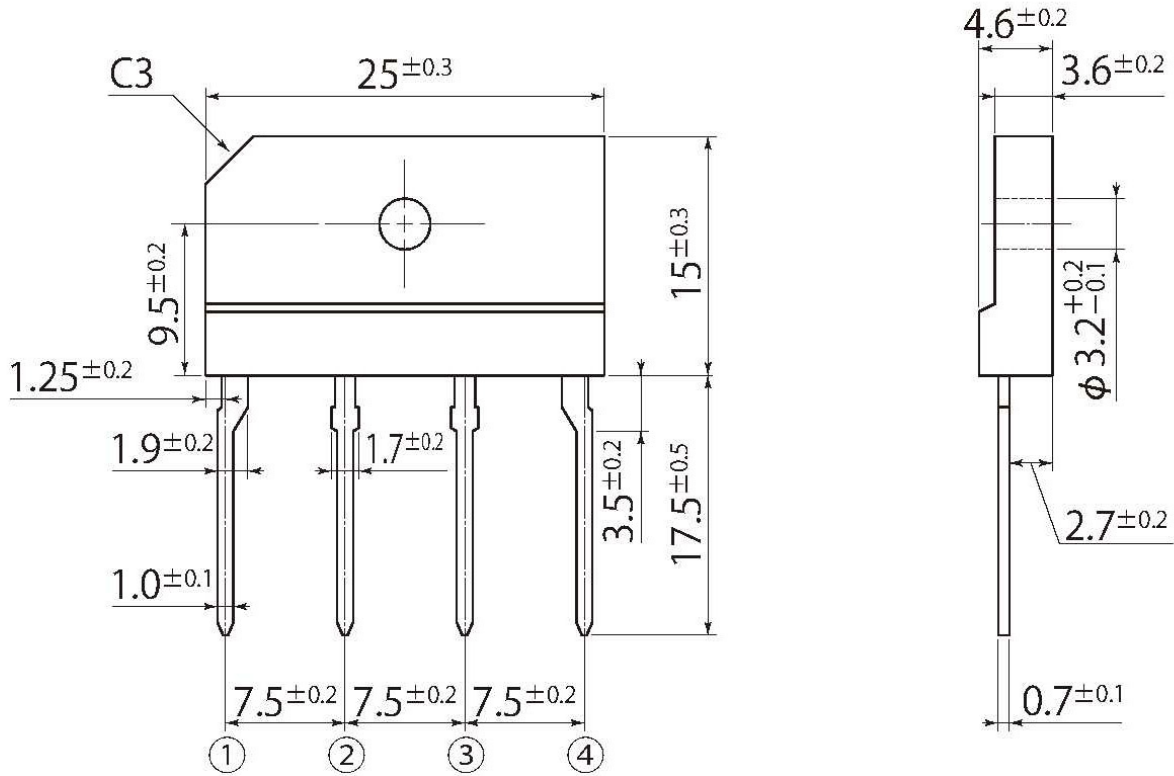


### Repetitive Surge Reverse Power Derating Curve



D3

JEDEC Code	—
JEITA Code	—
House Name	3S



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