

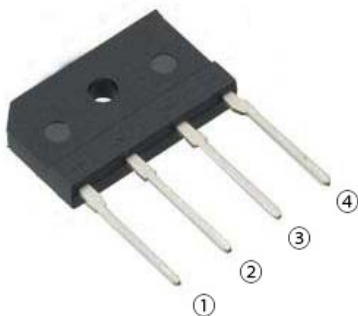
D4SBS6  
Bridge Diodes  
60V, 4A

Feature

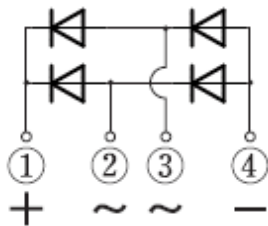
- Compact SIP
- SBD Bridge
- High Recovery Speed
- Low  $V_F$
- Pb free terminal
- RoHS:Yes

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 temperrature                | $T_{stg}$  |                                                                             | -40 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, $T_c=114^{\circ}\text{C}$   | 4          | A                  |
| Average forward current             | $I_F(AV)$  | 50Hz sine wave, Resistance load, Without heatsink, $T_a=46^{\circ}\text{C}$ | 2.3        | A                  |
| Surge forward current               | $I_{FSM}$  | 50Hz sine wave, Non-repetitive 1 cycle peak value, $T_j=25^{\circ}\text{C}$ | 60         | 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

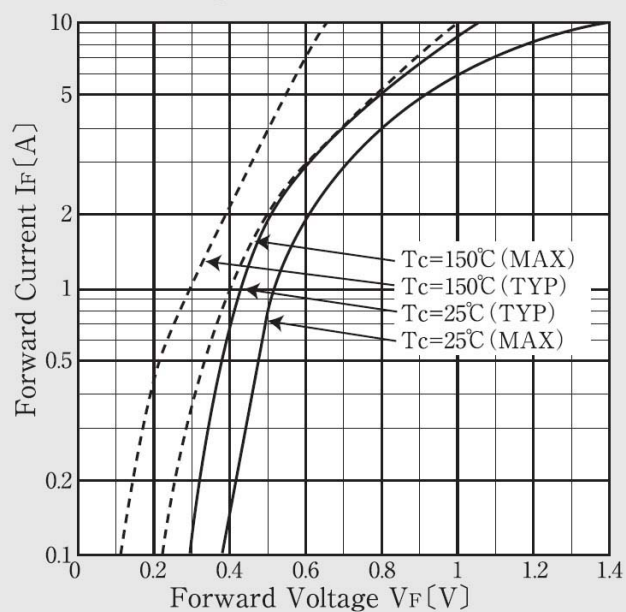
**Electrical Characteristics** (unless otherwise specified : Tc=25°C)

| Item               | Symbol         | Conditions                            | Ratings |     |      | Unit |
|--------------------|----------------|---------------------------------------|---------|-----|------|------|
|                    |                |                                       | MIN     | TYP | MAX  |      |
| Forward voltage    | V <sub>F</sub> | IF=2A, Pulse measurement, per diode   |         |     | 0.62 | V    |
| Reverse current    | I <sub>R</sub> | VR=60V, Pulse measurement, per diode  |         |     | 2000 | μA   |
| Total capacitance  | C <sub>t</sub> | f=1MHz, VR=10V, per diode             |         | 180 |      | pF   |
| Thermal resistance | Rth(j-c)       | Junction to case, With heatsink       |         |     | 5.5  | °C/W |
| Thermal resistance | Rth(j-l)       | Junction to lead, Without heatsink    |         |     | 6    | °C/W |
| Thermal resistance | Rth(j-a)       | Junction to ambient, Without heatsink |         |     | 30   | °C/W |

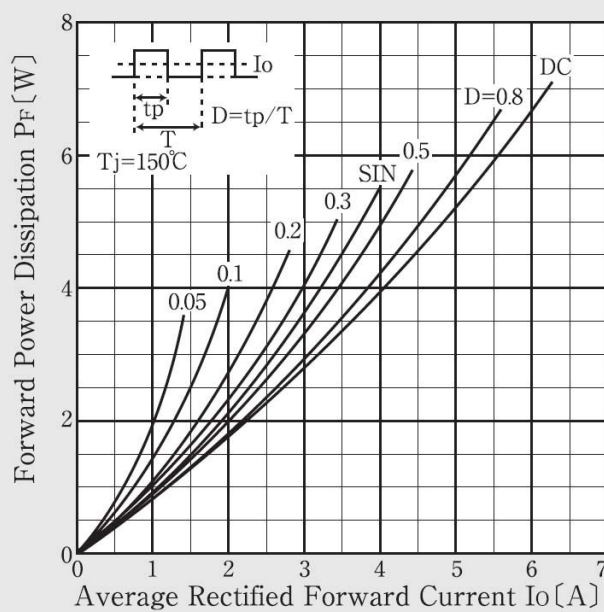
※ :See the original Specifications

## CHARACTERISTIC DIAGRAMS

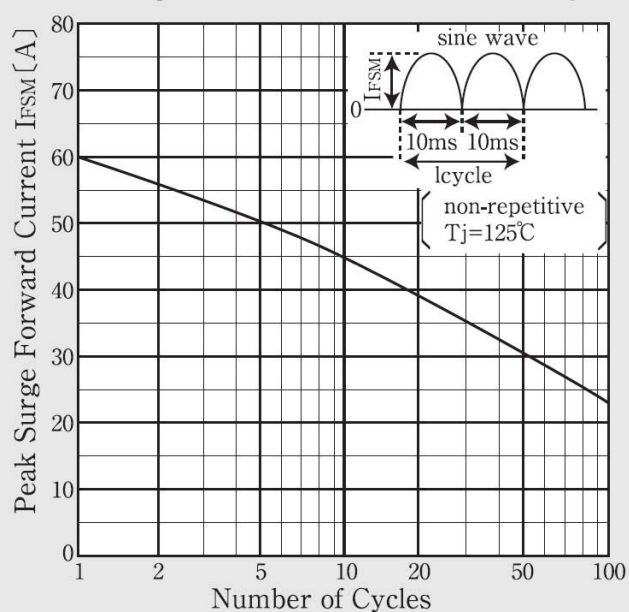
### Forward Voltage



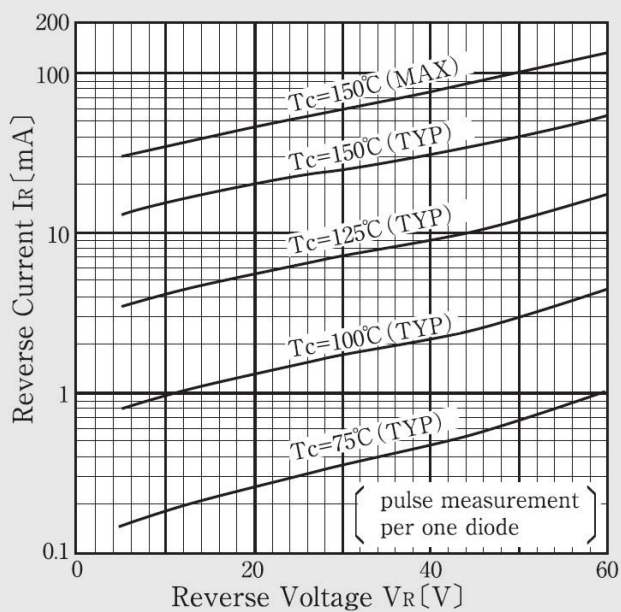
### Forward Power Dissipation



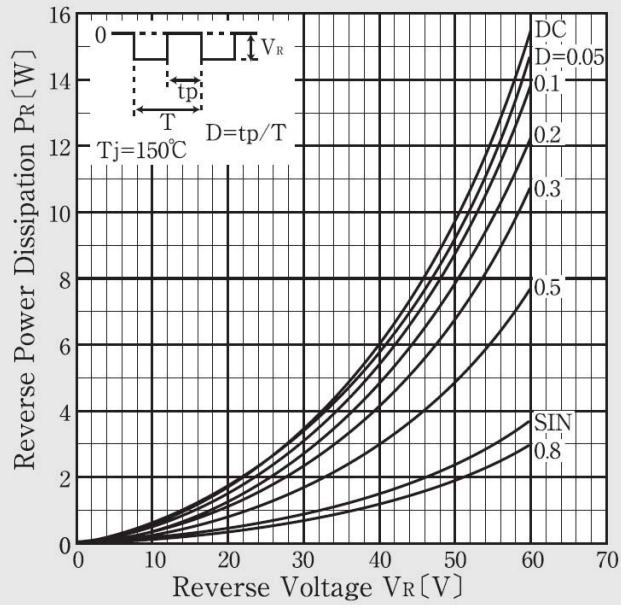
### Peak Surge Forward Current Capability



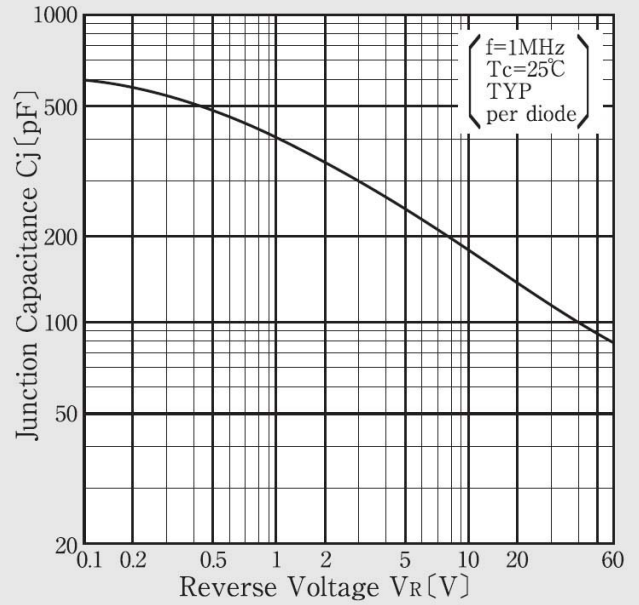
### Reverse Current



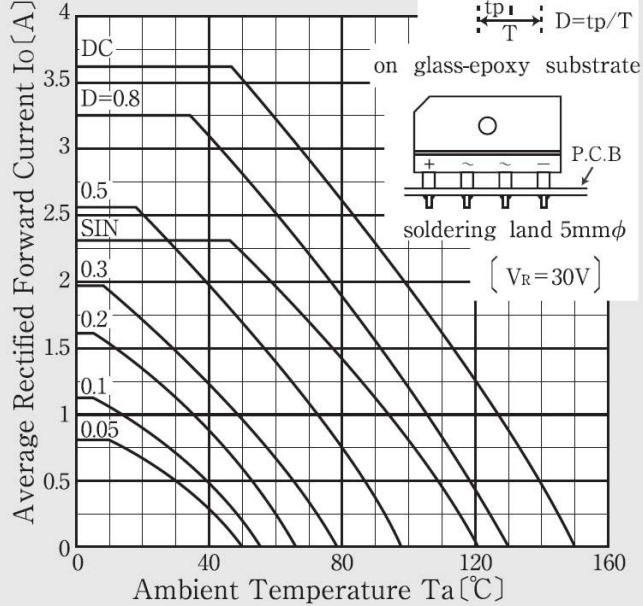
### Reverse Power Dissipation



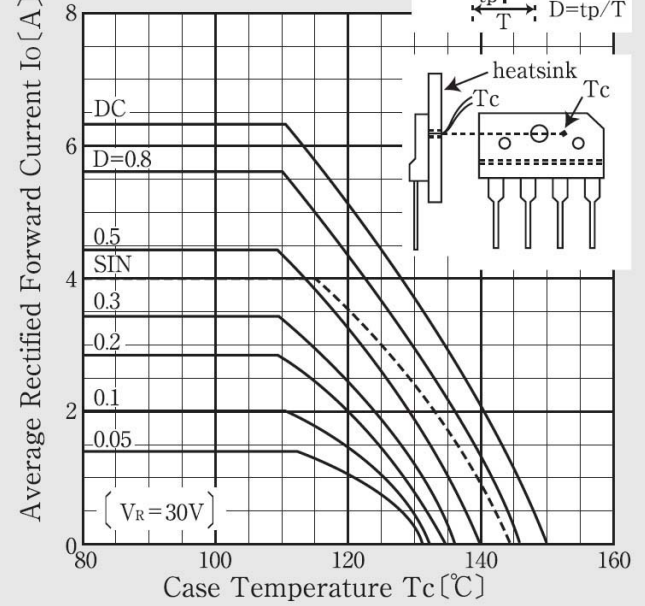
### Junction Capacitance



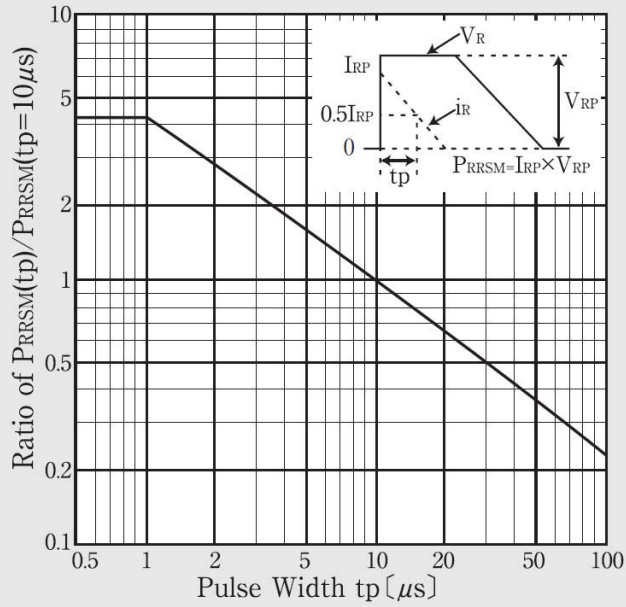
### Derating Curve



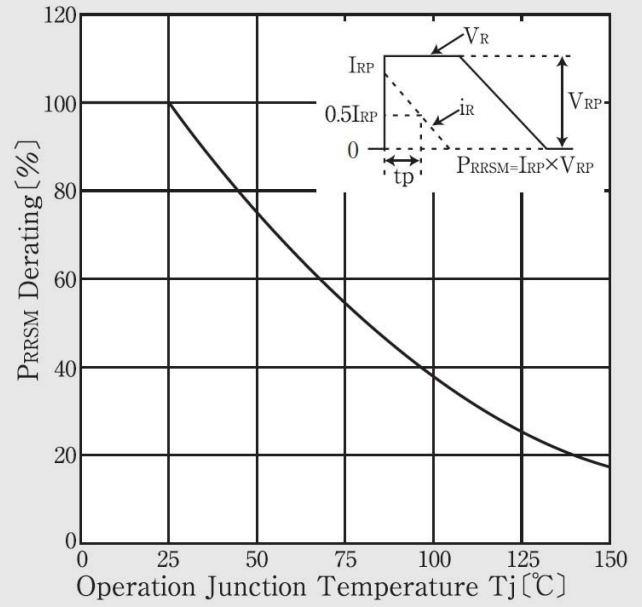
### Derating Curve



### Repetitive Surge Reverse Power Capability

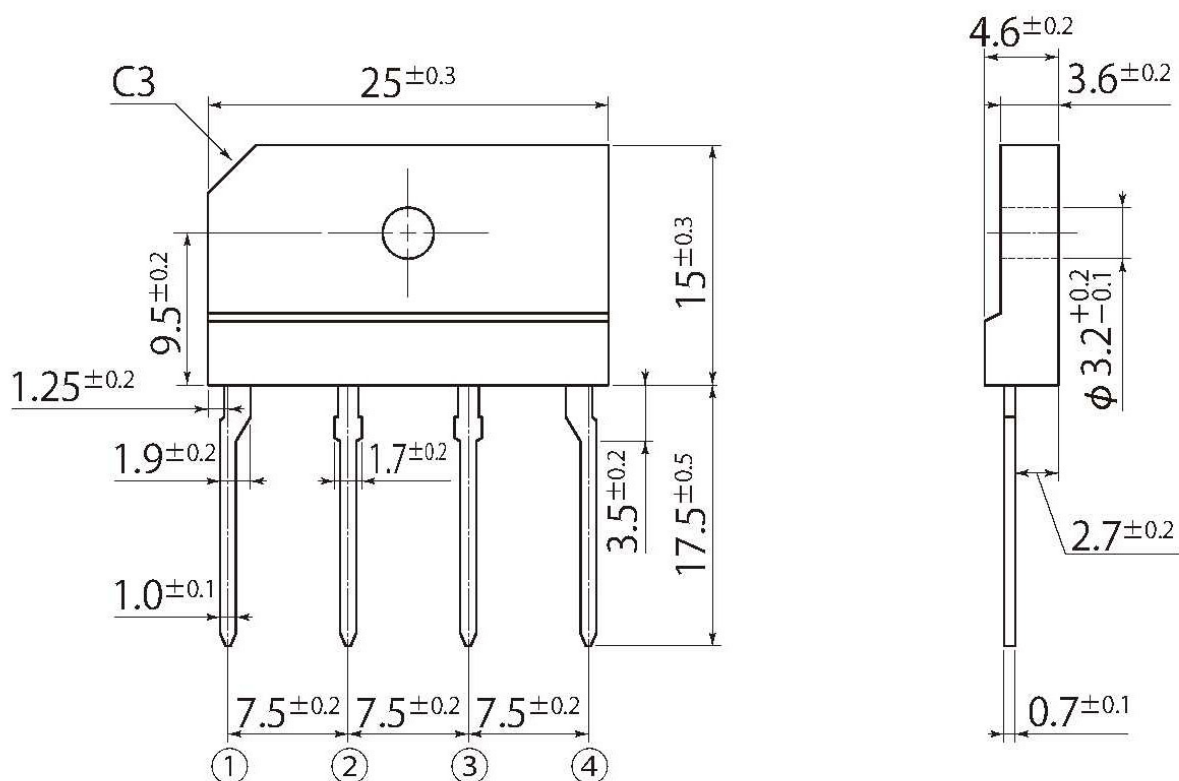


### Repetitive Surge Reverse Power Derating Curve



D3

|            |    |
|------------|----|
| JEDEC Code | —  |
| JEITA Code | —  |
| House Name | 3S |



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