

D30XBN20

Bridge Diodes  
200V, 30A

Feature

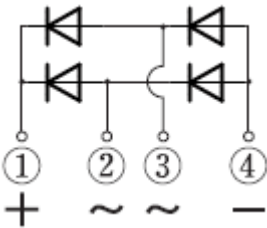
- Compact SIP
- SBD Bridge
- High Recovery Speed
- Low  $V_F$
- Low  $I_R$
- Pb free terminal
- RoHS:Yes

OUTLINE

Package (House Name): 5S



Equivalent circuit



Absolute Maximum Ratings (unless otherwise specified : Tc=25°C)

| Item                            | Symbol | Conditions                                                 | Ratings    | Unit |
|---------------------------------|--------|------------------------------------------------------------|------------|------|
| Storage temperature             | Tstg   |                                                            | -55 to 150 | °C   |
| Junction temperature            | Tj     |                                                            | 150        | °C   |
| Repetitive peak reverse voltage | VRRM   |                                                            | 200        | V    |
| Average forward current         | IF(AV) | 50Hz sine wave, Resistance load, With heatsink, Tc=91°C    | 30         | A    |
| Average forward current         | IF(AV) | 50Hz sine wave, Resistance load, Without heatsink, Ta=26°C | 3.1        | A    |
| Surge forward current           | IFSM   | 50Hz sine wave, Non-repetitive 1 cycle peak value, Tj=25°C | 350        | A    |
| Dielectric strength             | Vdis   | Terminals to case, AC 1 minute                             | 2.5        | kV   |
| Mounting torque                 | TOR    | (Recommended torque : 0.5N·m)                              | 0.8        | N·m  |

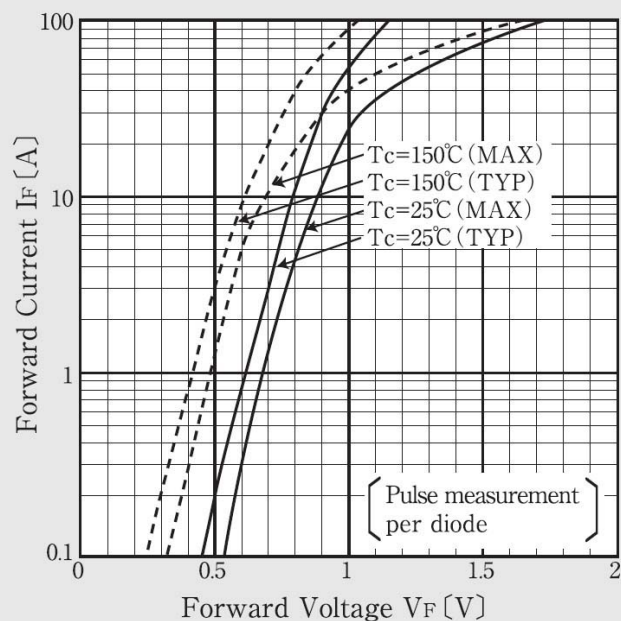
※ :See the original Specifications

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

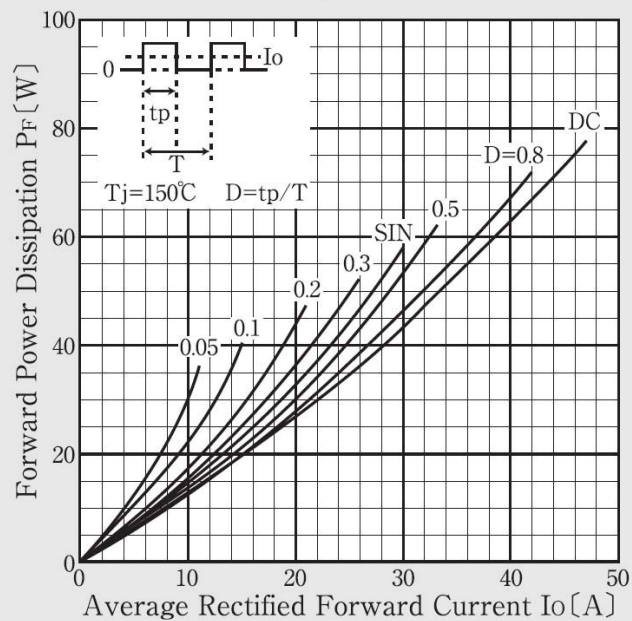
| Item               | Symbol        | Conditions                                | Ratings |     |     | Unit          |
|--------------------|---------------|-------------------------------------------|---------|-----|-----|---------------|
|                    |               |                                           | MIN     | TYP | MAX |               |
| Forward voltage    | $V_F$         | $I_F=15A$ , Pulse measurement, per diode  |         |     | 0.9 | V             |
| Reverse current    | $I_R$         | $V_R=200V$ , Pulse measurement, per diode |         |     | 10  | $\mu A$       |
| Total capacitance  | $C_t$         | $f=1MHz$ , $V_R=10V$ , per diode          |         | 360 |     | pF            |
| Thermal resistance | $R_{th(j-c)}$ | Junction to case, With heatsink           |         |     | 1   | $^{\circ}C/W$ |
| Thermal resistance | $R_{th(j-l)}$ | Junction to lead                          |         |     | 5   | $^{\circ}C/W$ |
| Thermal resistance | $R_{th(j-a)}$ | Junction to ambient                       |         |     | 25  | $^{\circ}C/W$ |

※ :See the original Specifications

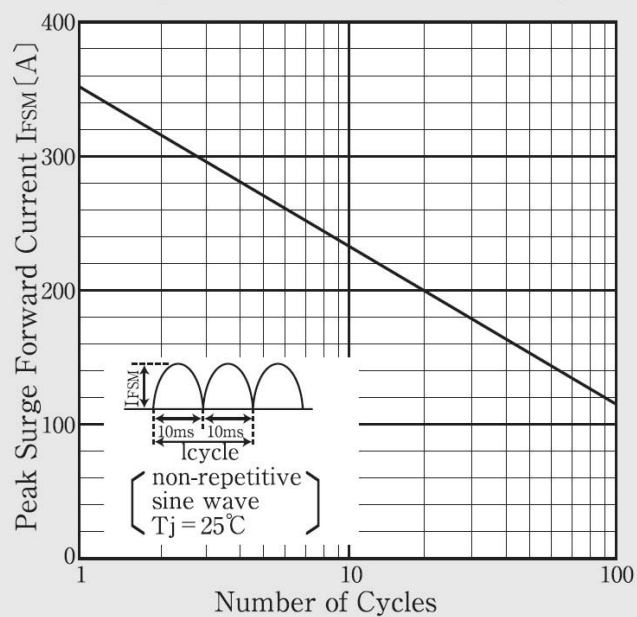
## Forward Voltage



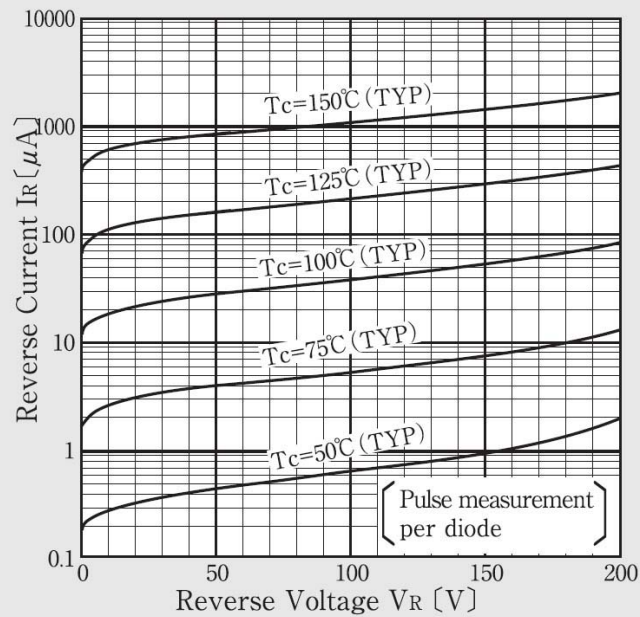
## Forward Power Dissipation



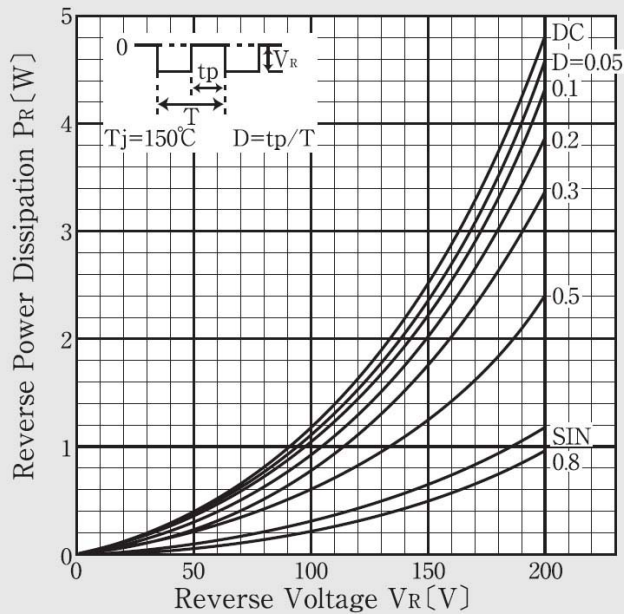
## Peak Surge Forward Current Capability



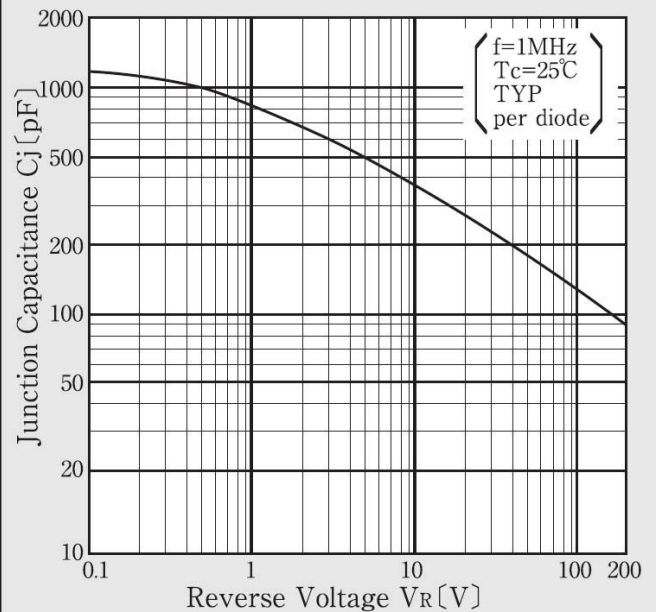
## Reverse Current



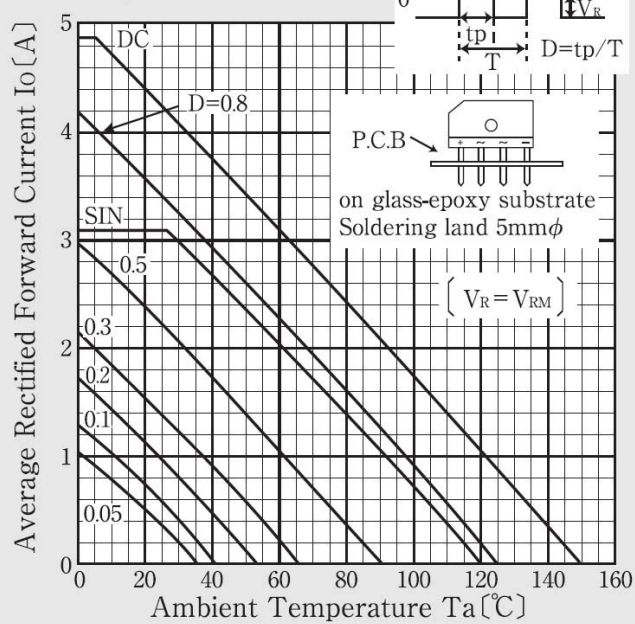
### Reverse Power Dissipation



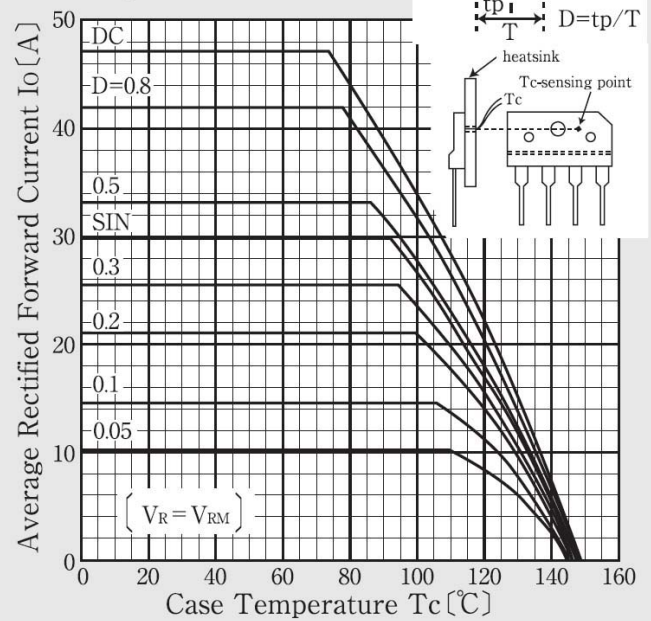
### Junction Capacitance



### Derating Curve



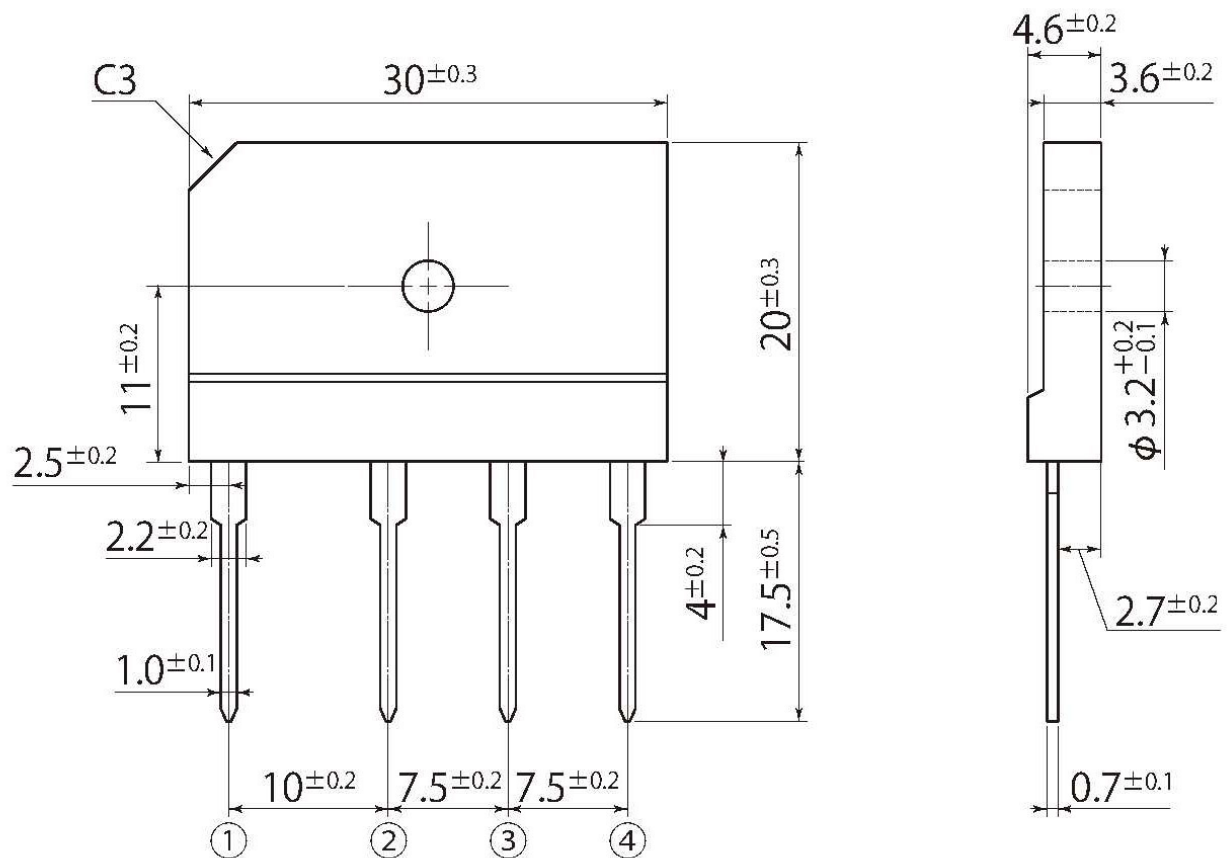
### Derating Curve



unit:mm

D4

|            |    |
|------------|----|
| JEDEC Code | —  |
| JEITA Code | —  |
| House Name | 5S |



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