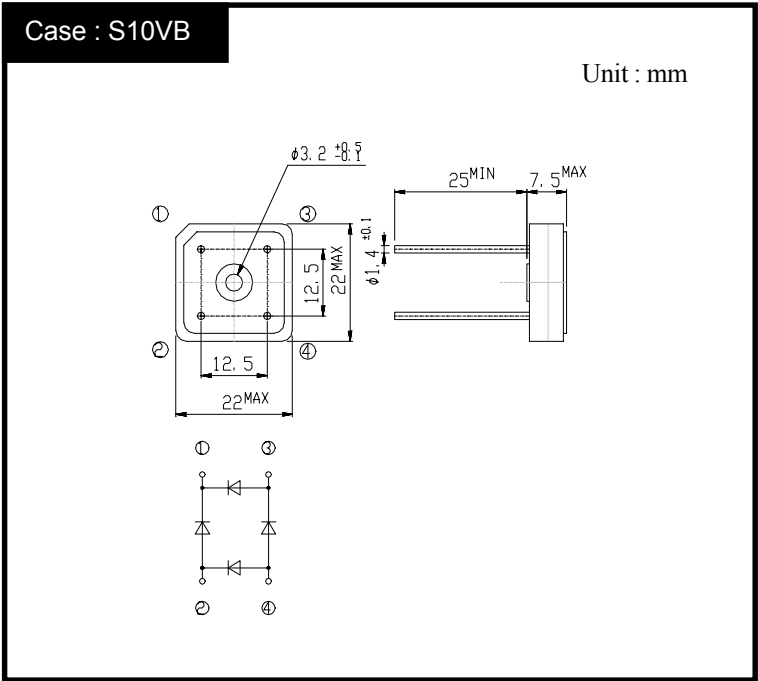


S10VB20

200V 10A

OUTLINE DIMENSIONS



RATINGS

● Absolute Maximum Ratings

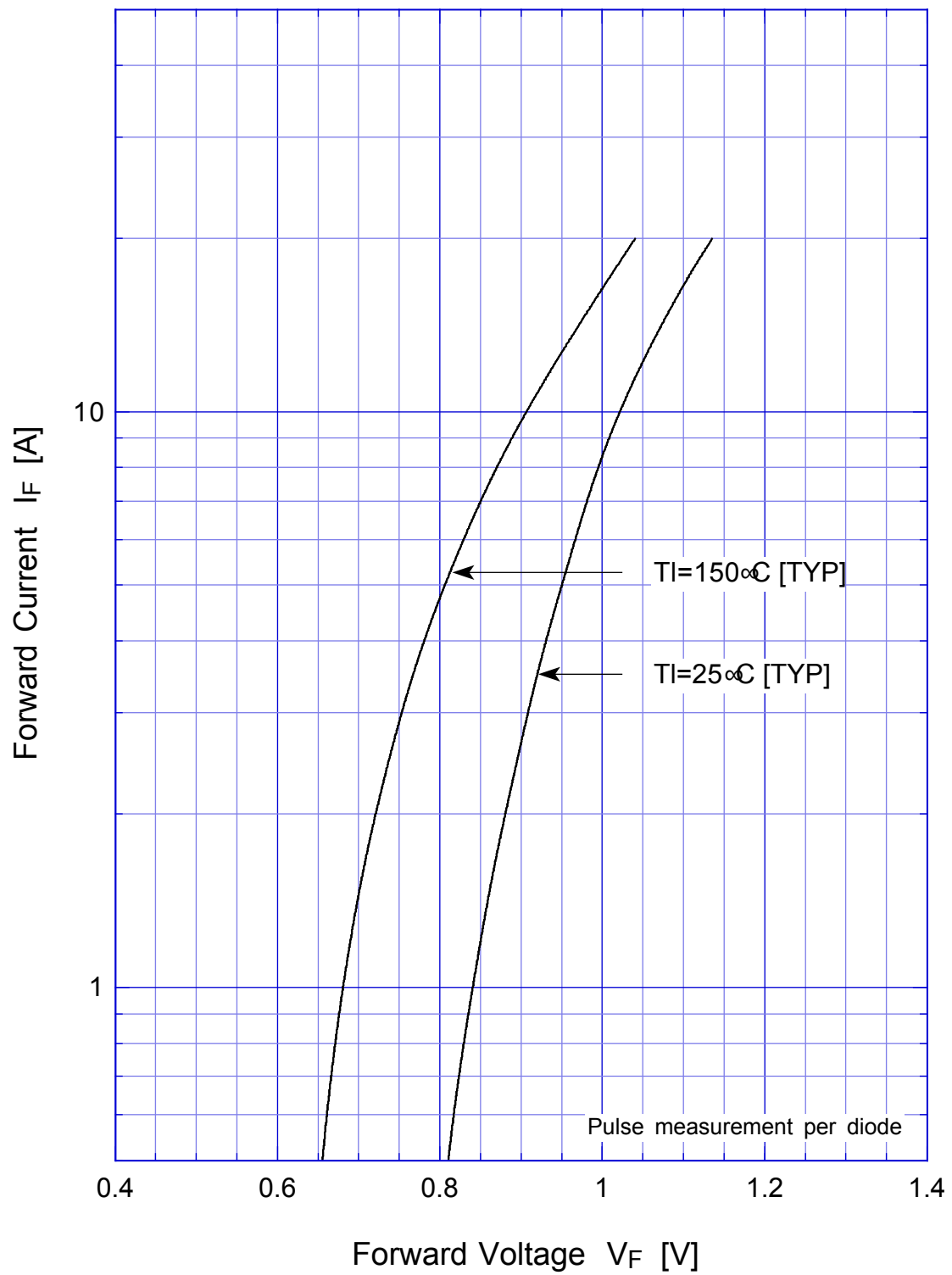
| Item                              | Symbol           | Conditions                                                            | Ratings | Unit             |
|-----------------------------------|------------------|-----------------------------------------------------------------------|---------|------------------|
| Storage Temperature               | Tstg             |                                                                       | -40~150 | ℃                |
| Operating Junction Temperature    | Tj               |                                                                       | 150     | ℃                |
| Maximum Reverse Voltage           | V <sub>RM</sub>  |                                                                       | 200     | V                |
| Average Rectified Forward Current | I <sub>O</sub>   | 50Hz sine wave, R-load, Ta=40℃ With heatsink, θ <sub>fa</sub> =2.4℃/W | 10      | A                |
|                                   |                  | 50Hz sine wave, R-load, Ta=40℃ Without heatsink                       | 3.7     |                  |
| Peak Surge Forward Current        | I <sub>FSM</sub> | 50Hz sine wave, Non-repetitive 1cycle peak value, Tj=25℃              | 200     | A                |
| Current Squared Time              | I <sup>2</sup> t | 1ms≤t<10ms Tc=25℃                                                     | 110     | A <sup>2</sup> s |
| Dielectric Strength               | Vdis             | Terminals to case, AC 1 minute                                        | 2       | kV               |
| Mounting Torque                   | TOR              | (Recommended torque : 0.5N·m)                                         | 0.8     | N·m              |

● Electrical Characteristics (Tl=25℃)

| Item               | Symbol          | Conditions                                                               | Ratings  | Unit |
|--------------------|-----------------|--------------------------------------------------------------------------|----------|------|
| Forward Voltage    | V <sub>F</sub>  | IF=5A, Pulse measurement, Rating of per diode                            | Max.1.05 | V    |
| Reverse Current    | I <sub>R</sub>  | V <sub>R</sub> =V <sub>RM</sub> , Pulse measurement, Rating of per diode | Max.10   | μA   |
| Thermal Resistance | θ <sub>jl</sub> | junction to lead                                                         | Max.2.8  | ℃/W  |

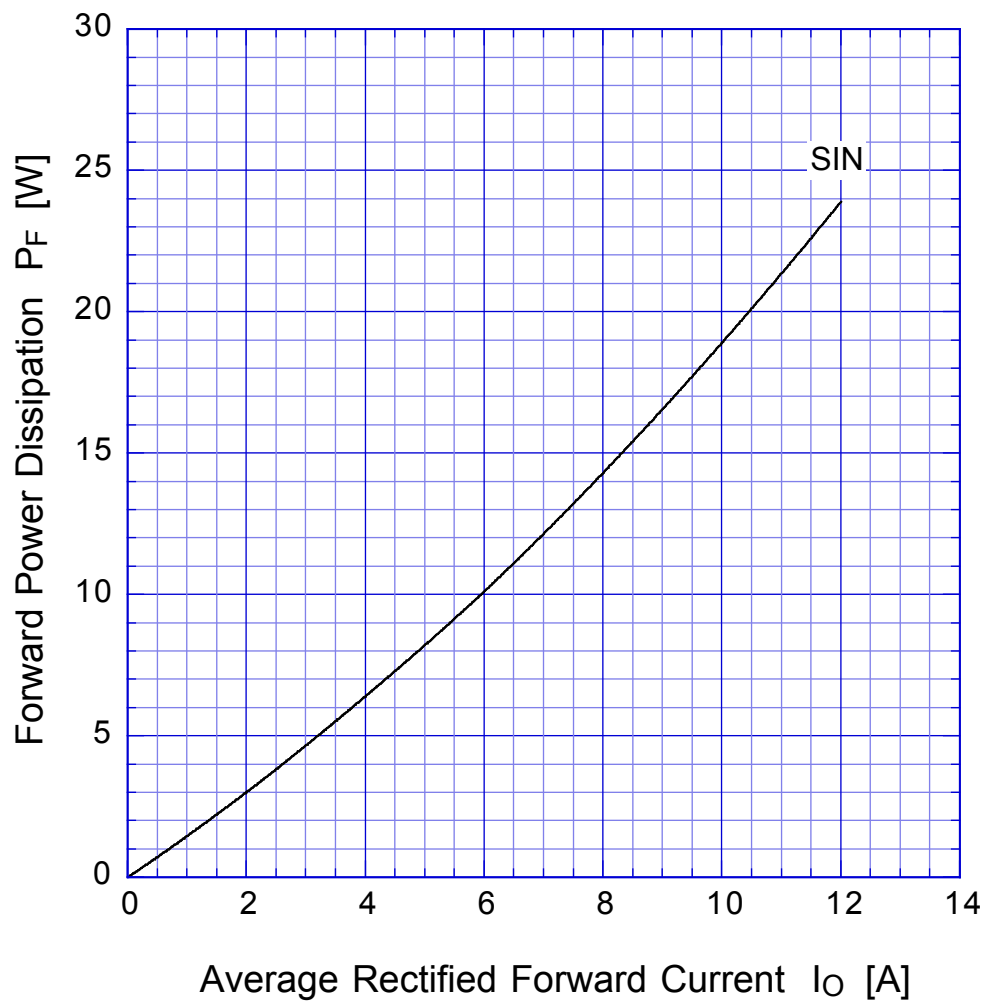
S10VBx

Forward Voltage



S10VBx

Forward Power Dissipation

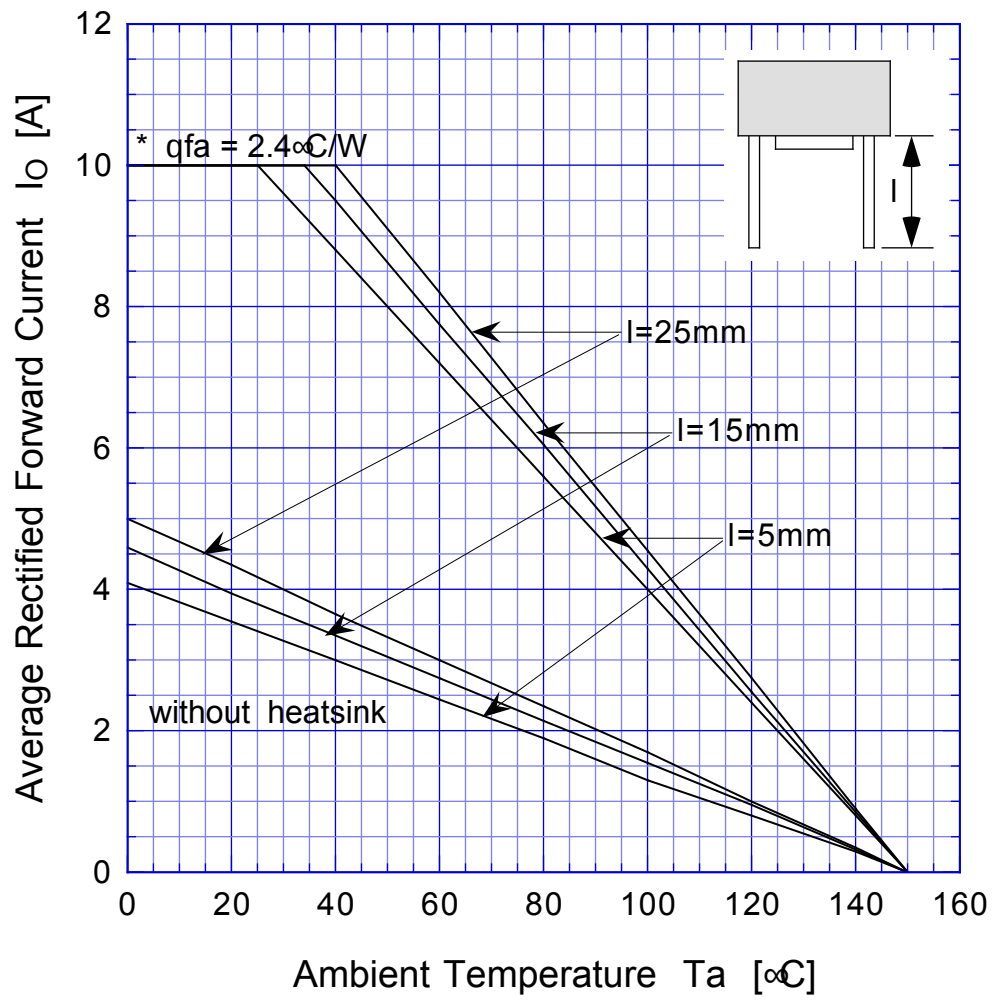


$T_j = 150^{\circ}\text{C}$

Sine wave

# S10VBx

## Derating Curve



Sine wave

R-load

Free in air

\* with thermal compound, TOR=5kg-cm

S10VBx

Peak Surge Forward Capability

