

D10XB80

800V 10A

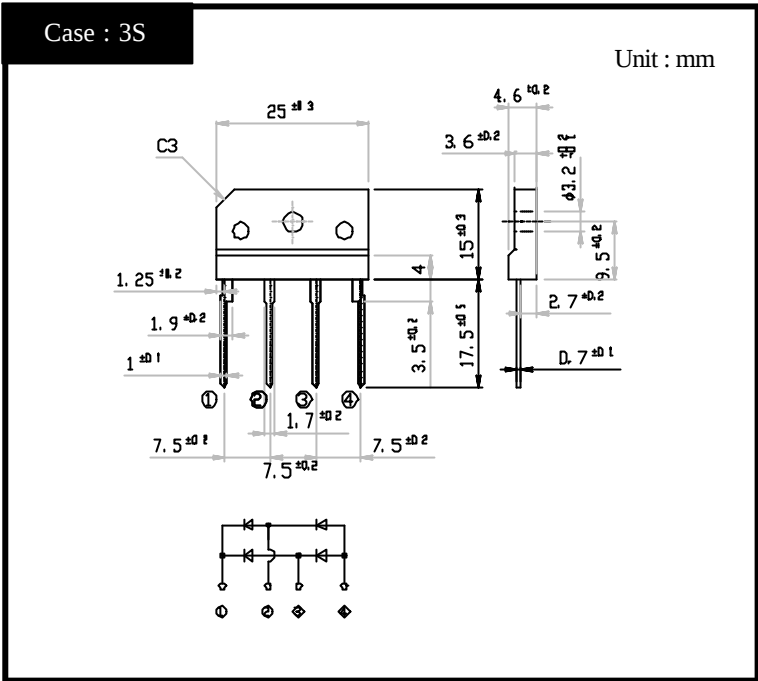
FEATURES

- Thin Single In-Line Package
- High current capacity with Small Package
- High IFSM
- Superior Thermal Conductivity

APPLICATION

- Switching power supply
- Home Appliances, Office Equipment
- Factory Automation, Inverter

OUTLINEDIMENSIONS



RATINGS

- Absolute Maximum Ratings (If not specified Tc=25 )

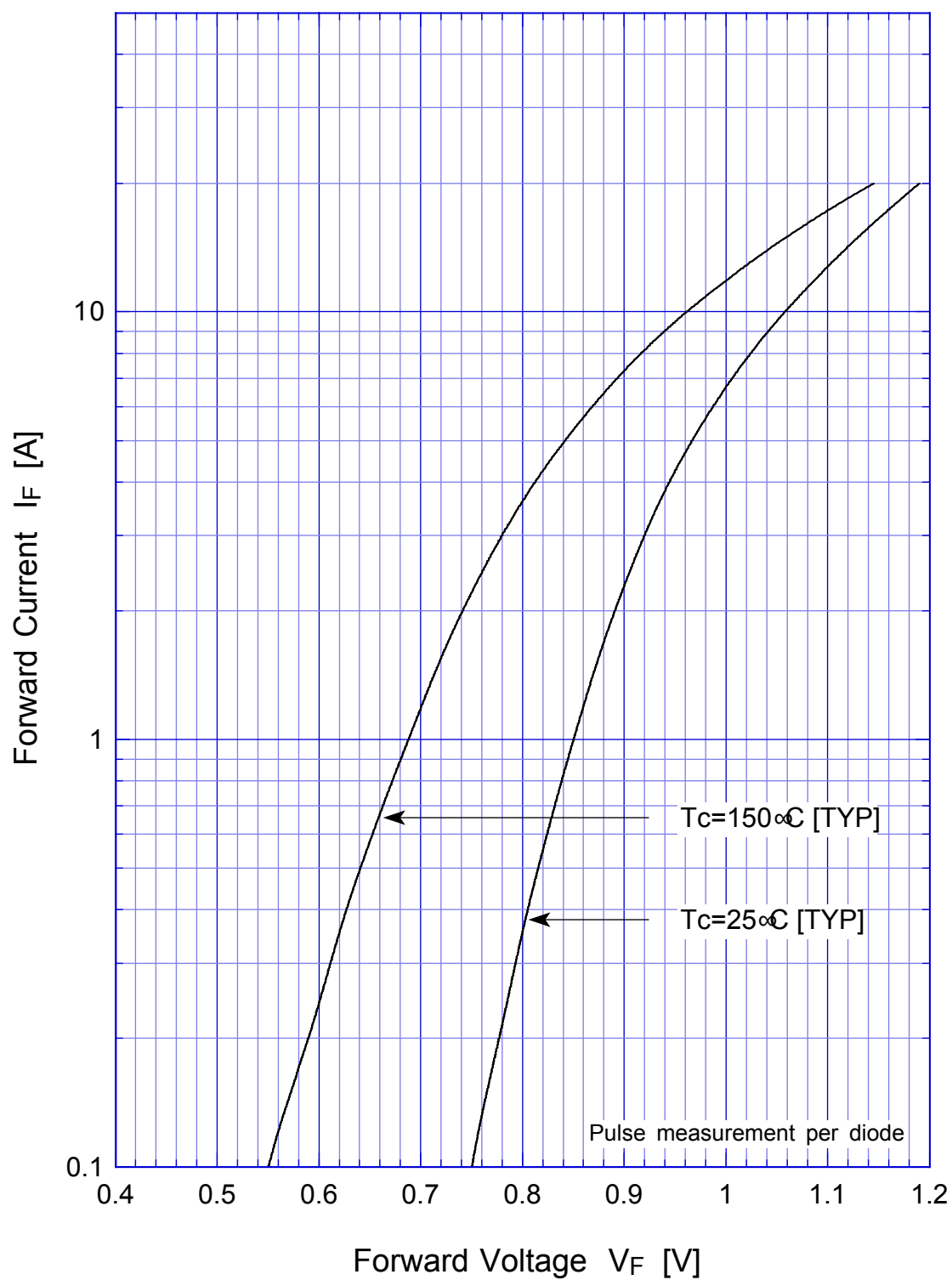
| Item                              | Symbol           | Conditions                                              | Ratings   | Unit             |
|-----------------------------------|------------------|---------------------------------------------------------|-----------|------------------|
| Storage Temperature               | Tstg             |                                                         | -40 ~ 150 |                  |
| Operating Junction Temperature    | Tj               |                                                         | 150       |                  |
| Maximum Reverse Voltage           | V <sub>RM</sub>  |                                                         | 800       | V                |
| Average Rectified Forward Current | I <sub>O</sub>   | 50Hz sine wave, R-load With heatsink Tc=100             | 10        | A                |
|                                   |                  | 50Hz sine wave, R-load Without heatsink Ta=25           | 2.7       |                  |
| Peak Surge Forward Current        | I <sub>FSM</sub> | 50Hz sine wave, Non-repetitive 1cycle peak value, Tj=25 | 120       | A                |
| Current Squared Time              | I <sup>2</sup> t | 1ms t < 10ms Tj=25                                      | 60        | A <sup>2</sup> s |
| Dielectric Strength               | V <sub>dis</sub> | Terminals to case, AC 1 minute                          | 2.5       | kV               |
| Mounting Torque                   | TOR              | (Recommended torque 0.5N·m )                            | 0.8       | N·m              |

- Electrical Characteristics (If not specified Tc=25 )

| Item               | Symbol          | Conditions                                                               | Ratings | Unit |
|--------------------|-----------------|--------------------------------------------------------------------------|---------|------|
| Forward Voltage    | V <sub>F</sub>  | I <sub>F</sub> =5A, Pulse measurement, Rating of per diode               | Max.1.1 | 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>jc</sub> | unction to case With heatsink                                            | Max.2.3 | /W   |
|                    | θ <sub>jl</sub> | unction to lead Without heatsink                                         | Max.6   |      |
|                    | θ <sub>ja</sub> | unction to ambient Without heatsink                                      | Max.26  |      |

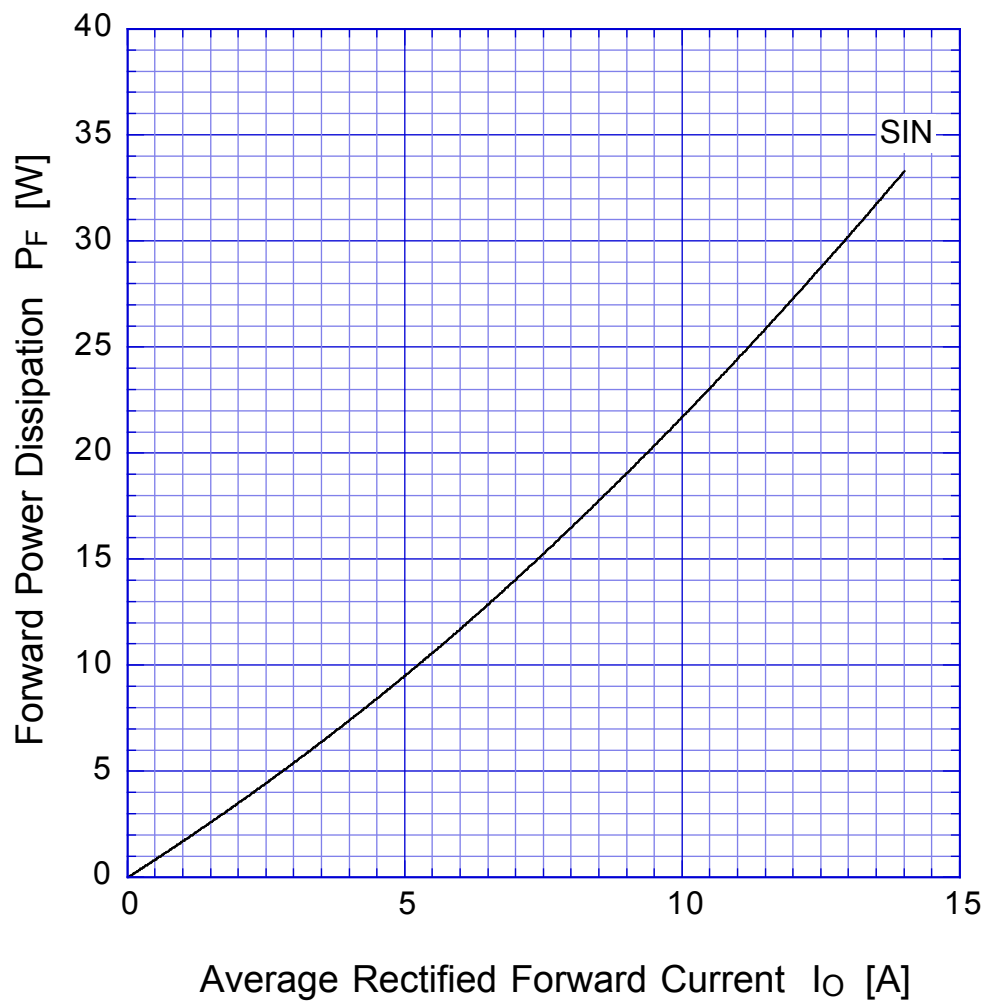
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Forward Voltage



D10XBx

Forward Power Dissipation

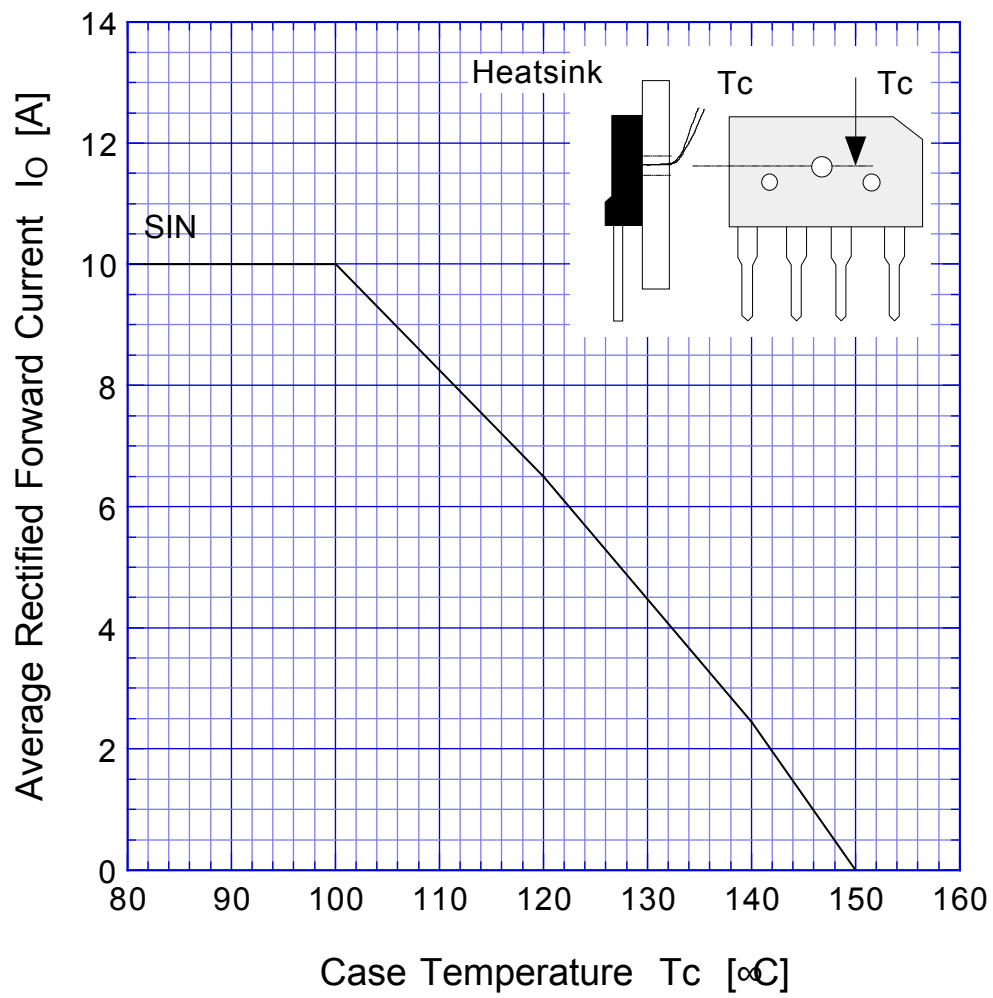


$T_j = 150^{\circ}\text{C}$

Sine wave

# D10XBx

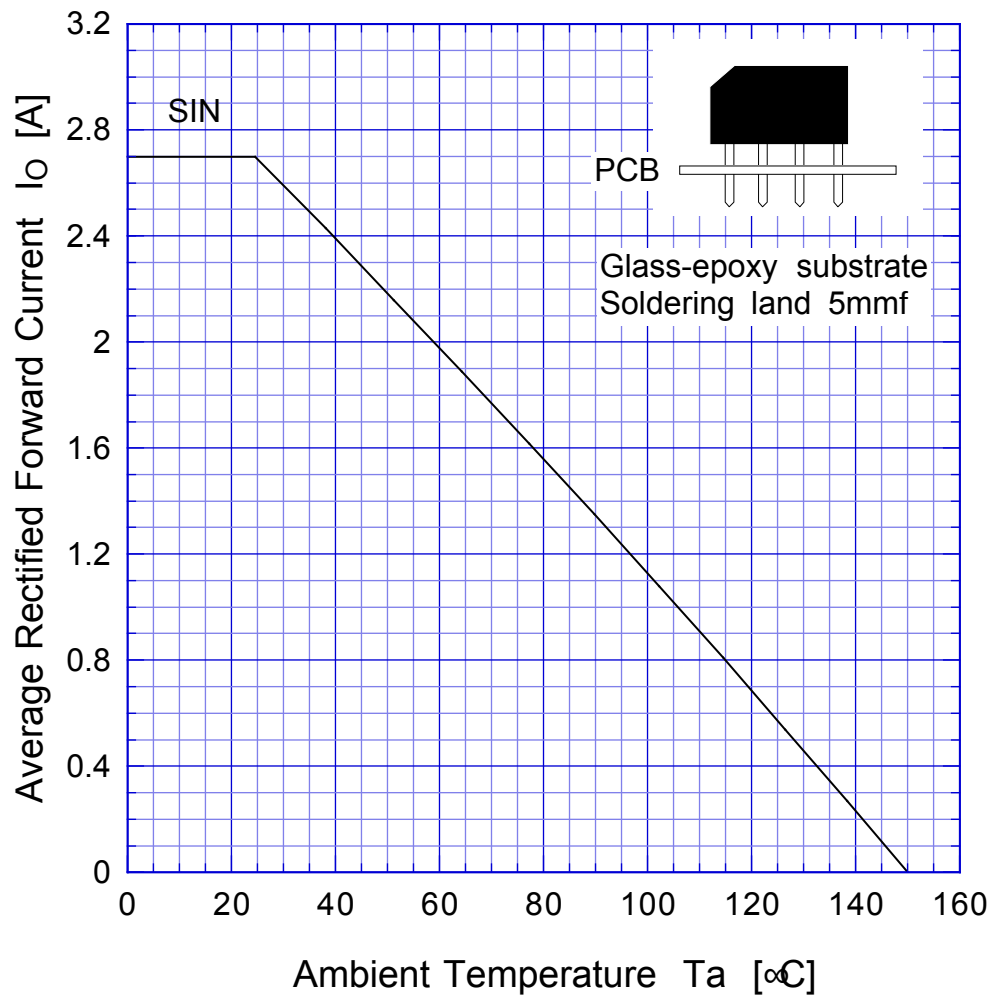
## Derating Curve



Sine wave  
R-load  
with heatsink

# D10XBx

## Derating Curve



## D10XBx

## Peak Surge Forward Capability

