

# SHINDENGEN

## General Purpose Rectifiers

DIL Bridges

# S1YB20

## 200V 0.4A

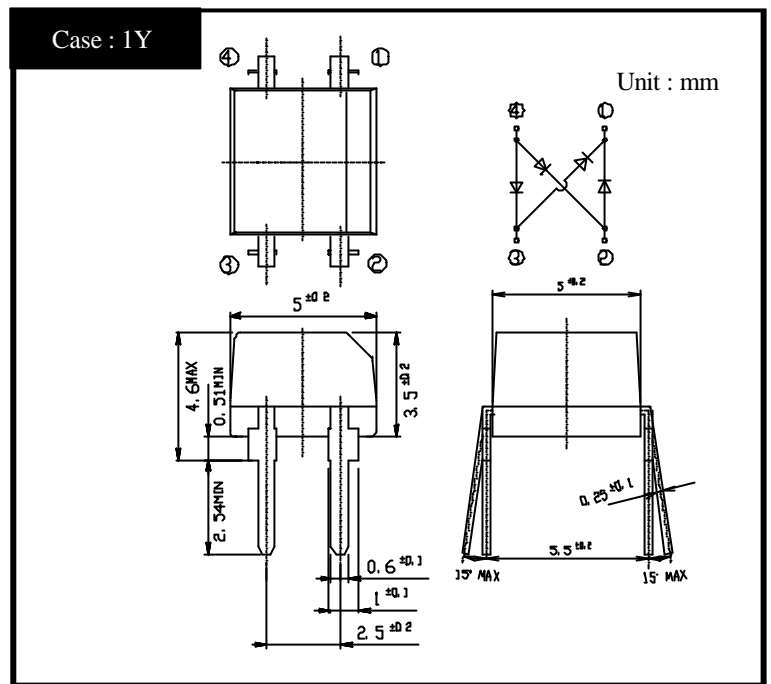
### FEATURES

Small Dual In-Line(:DIL) Package  
 High reliability with superior  
 moisture resistance  
 Applicable to Automatic Insertion

### APPLICATION

Switching power supply  
 Home Appliances, Office Equipment  
 Telecommunication, Factory Automation

### OUTLINE DIMENSIONS



### RATINGS

Absolute Maximum Ratings (If not specified  $T_I=25$  )

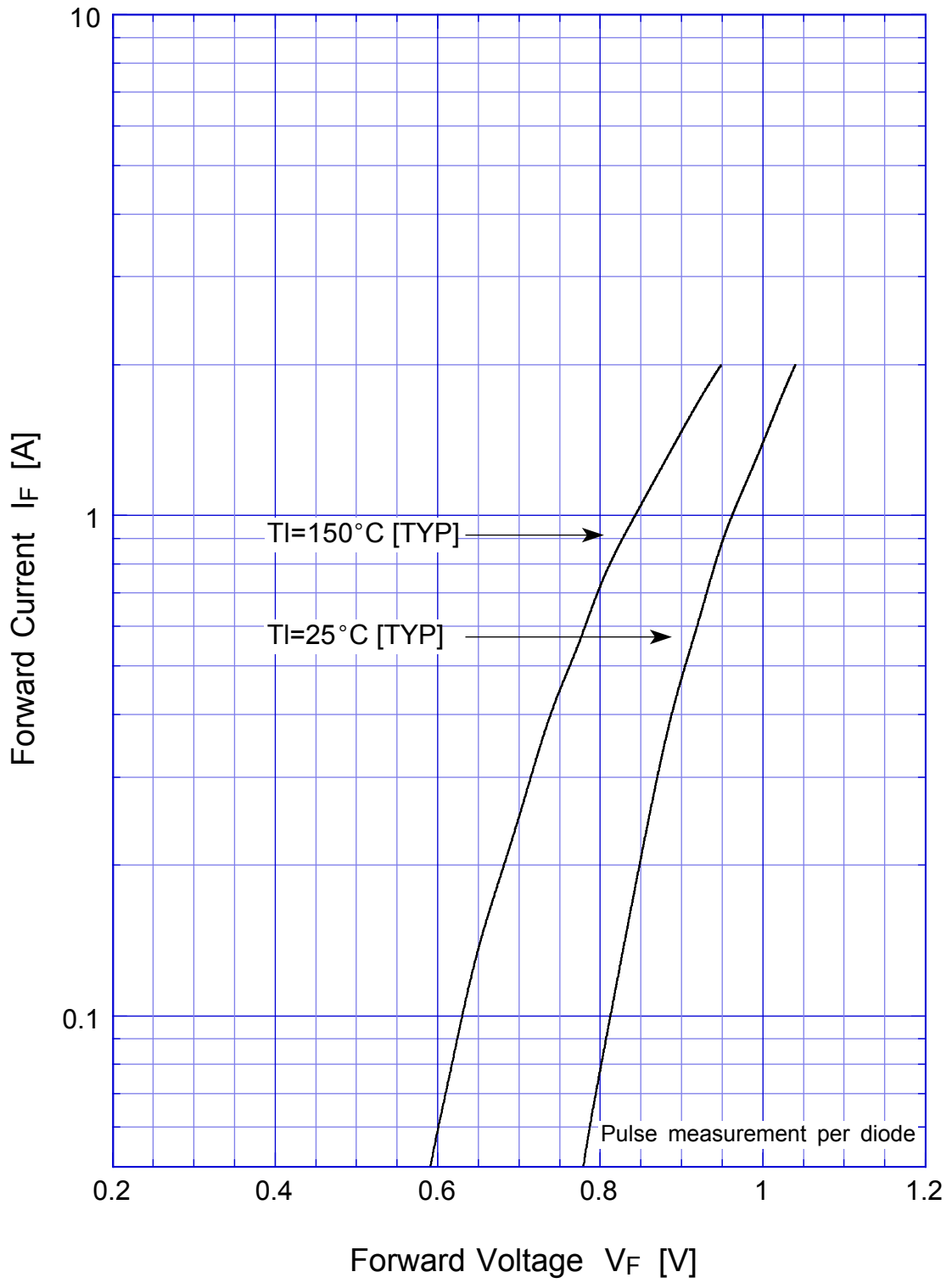
| Item                              | Symbol    | Conditions  | Ratings   | Unit   |
|-----------------------------------|-----------|---|-----------|--------|
| Storage Temperature               | $T_{stg}$ |   | -40 ~ 150 |        |
| Operating Junction Temperature    | $T_j$     |   | 150       |        |
| Maximum Reverse Voltage           | $V_{RM}$  |   | 200       | V      |
| Average Rectified Forward Current | $I_o$     | 50Hz sine wave, R-load, $T_a=40$                            | 0.4       | A      |
| Peak Surge Forward Current        | $I_{FSM}$ | 50Hz sine wave, Non-repetitive 1 cycle peak value, $T_j=25$ | 30        | A      |
| Current Squared Time              | $I^2t$    | 1ms $t < 10ms$ $T_j=25$                                     | 4.5       | $A^2s$ |

Electrical Characteristics (If not specified  $T_I=25$  )

| Item               | Symbol        | Conditions  | Ratings  | Unit    |
|--------------------|---------------|---|----------|---------|
| Forward Voltage    | $V_F$         | $I_F=0.2A$ , Pulse measurement, Rating of per diode   | Max.1.05 | V       |
| Reverse Current    | $I_R$         | $V_R=V_{RM}$ , Pulse measurement, Rating of per diode | Max.10   | $\mu A$ |
| Thermal Resistance | $\theta_{jl}$ | junction to lead                                      | Max.20   | /W      |
|                    | $\theta_{ja}$ | junction to ambient                                   | Max.150  |         |

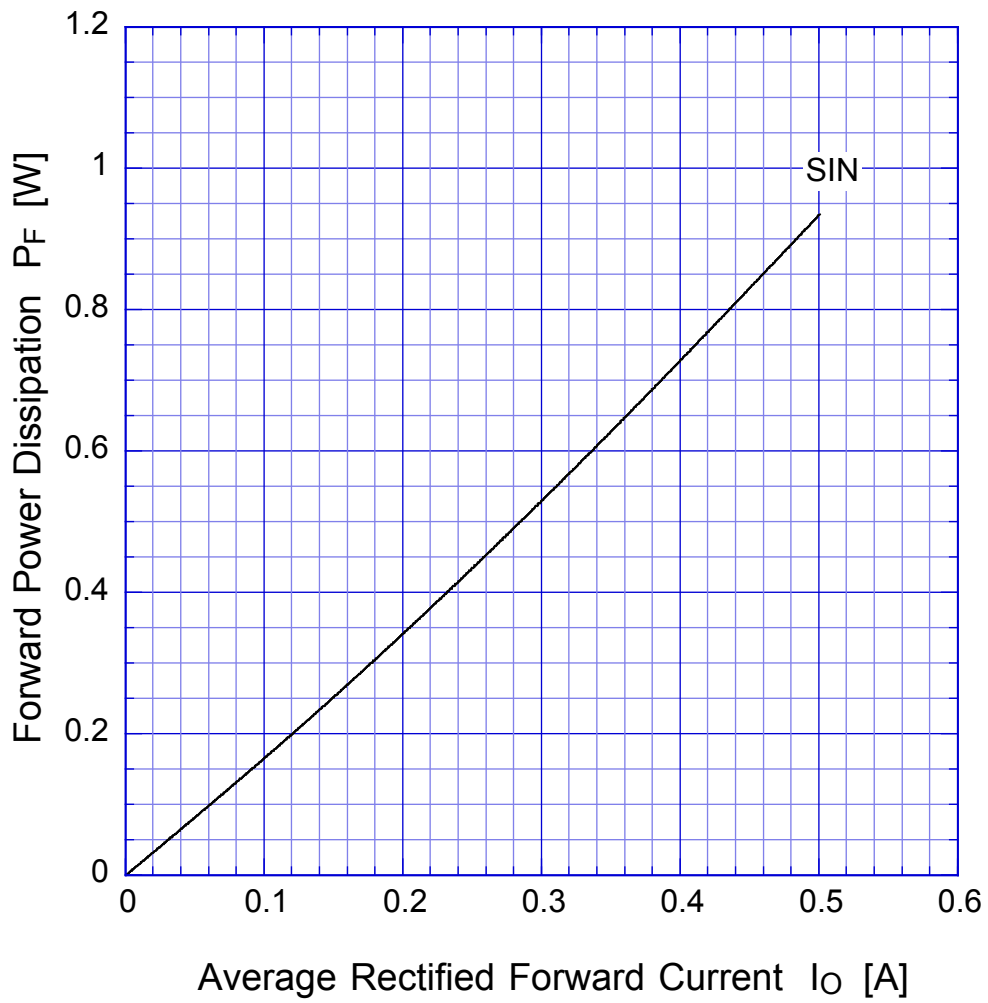
S1YBx

Forward Voltage



S1YBx

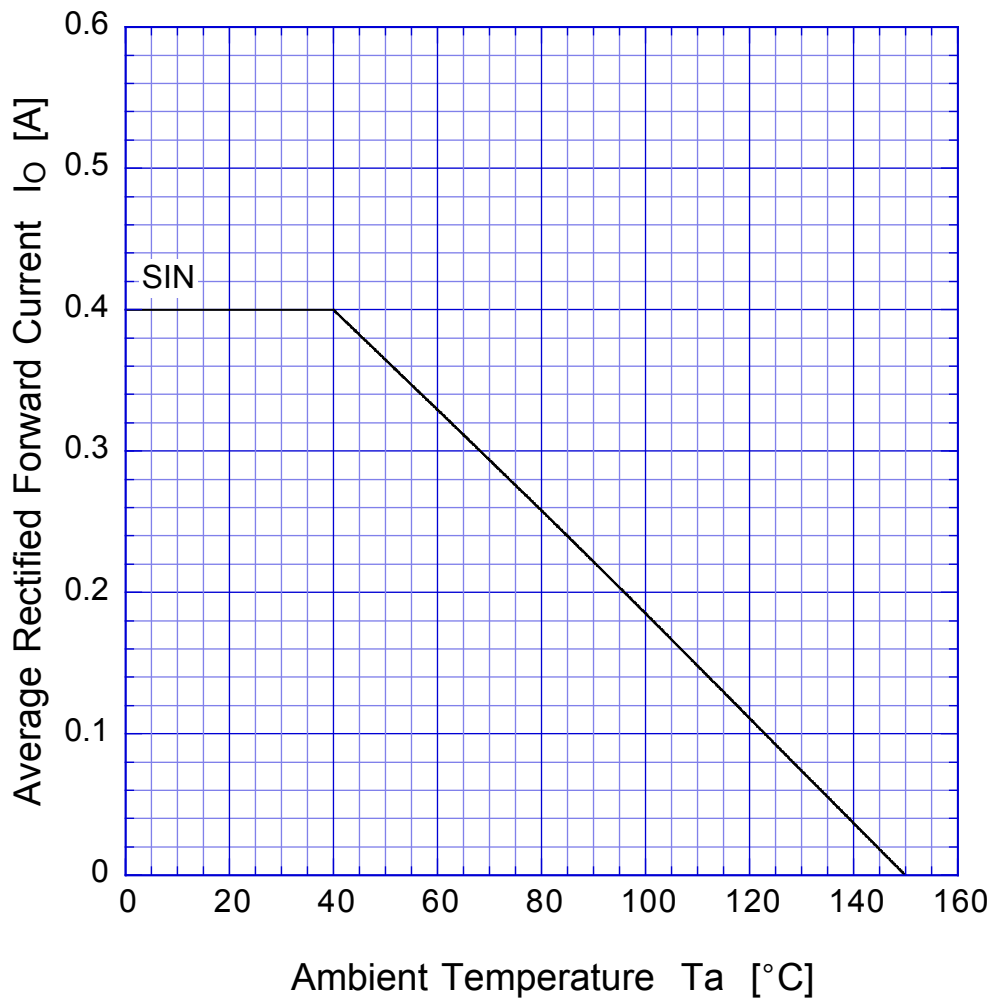
Forward Power Dissipation



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

S1YBx

Derating Curve



Sine wave  
R-load  
Free in air

# S1YBx

## Peak Surge Forward Capability

