

# SHINDENGEN

## General Purpose Rectifiers

Single

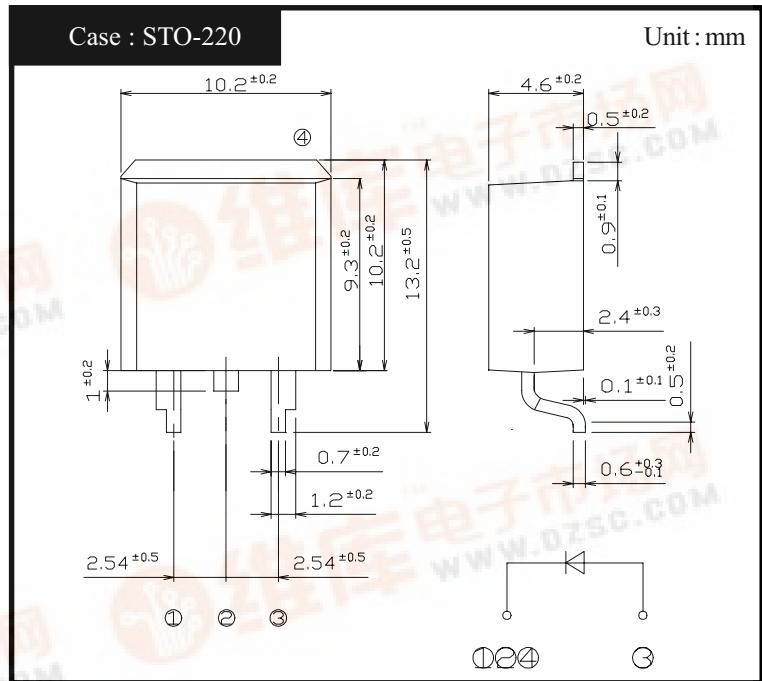
**DF25V60**

**600V 25A**

### FEATURES

1. Applicable to Automatic Insertion
2. High IFSM

### OUTLINE DIMENSIONS



### RATINGS

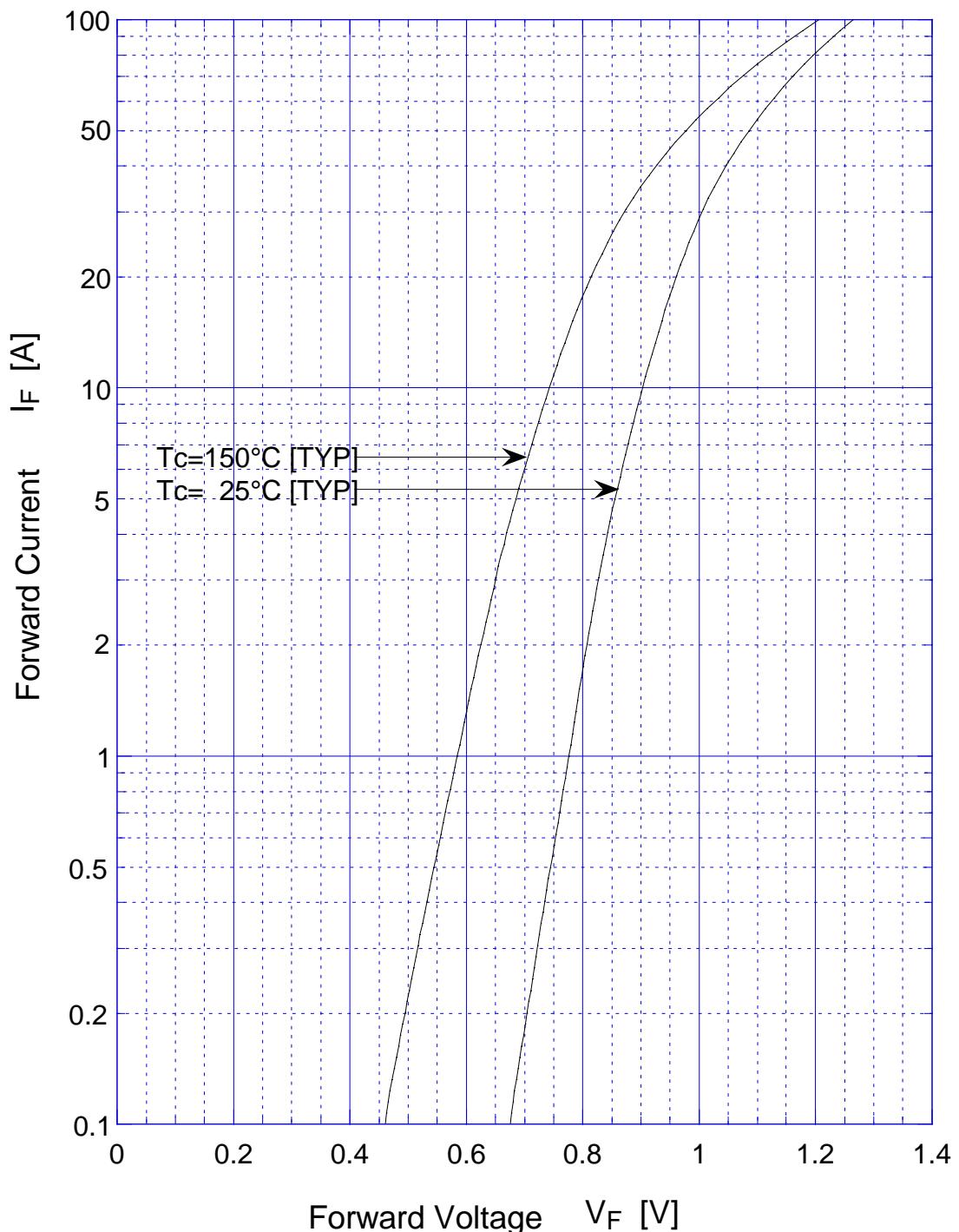
#### ● Absolute Maximum Ratings (If not specified $T_c=25^\circ\text{C}$ )

| Item                              | Symbol    | Conditions   | Ratings   | Unit                 |
|-----------------------------------|-----------|--|-----------|----------------------|
| Storage Temperature               | $T_{stg}$ |  | -55 ~ 150 | °C                   |
| Operating Junction Temperature    | $T_j$     |  | 150       | °C                   |
| Maximum Reverse Voltage           | $V_{RM}$  |  | 600       | V                    |
| Average Rectified Forward Current | $I_O$     | 50Hz sine wave, R-load, $T_c=136^\circ\text{C}$                          | 25        | A                    |
| Peak Surge Forward Current        | $I_{FSM}$ | 50Hz sine wave, Non-repetitive 1cycle peak value, $T_j=25^\circ\text{C}$ | 400       | A                    |
| Current Squared Time              | $I^2t$    | $1\text{ms} \leq t < 10\text{ms}$ $T_j=25^\circ\text{C}$                 | 600       | $\text{A}^2\text{s}$ |

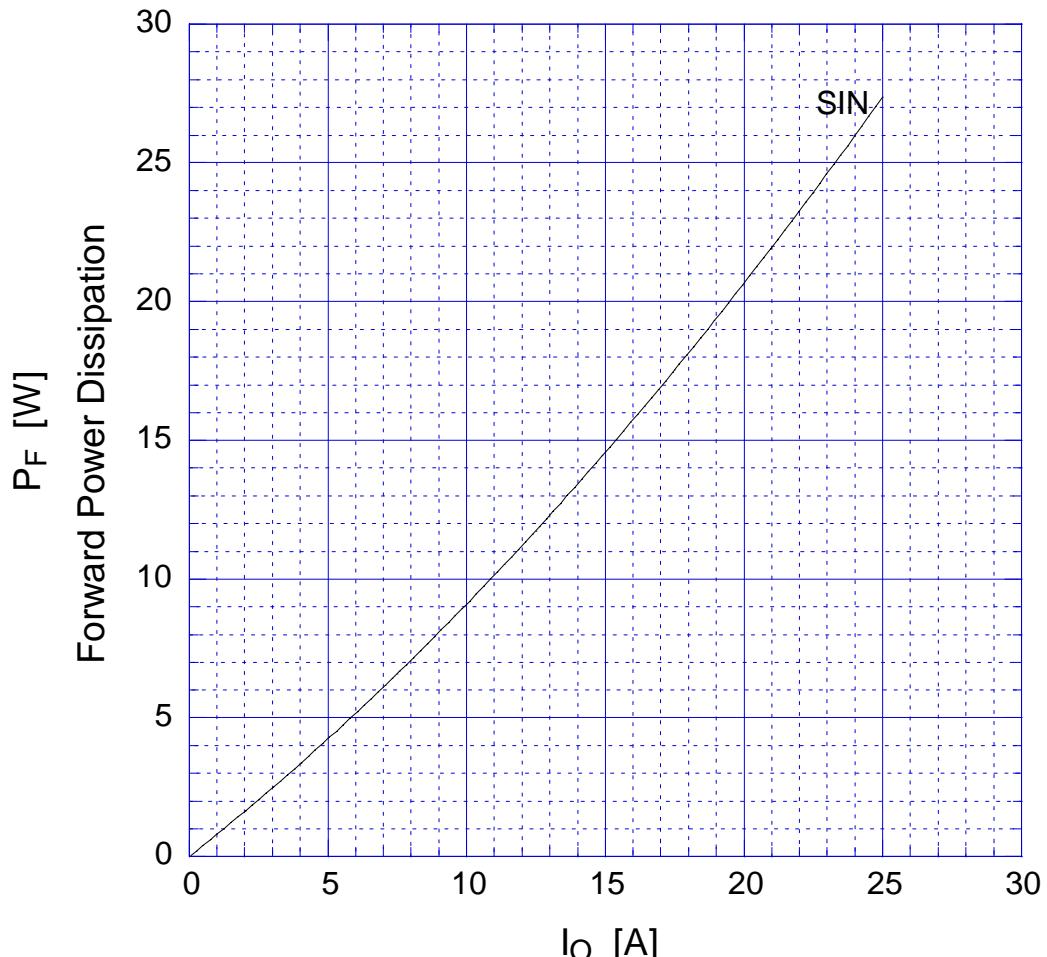
#### ● Electrical Characteristics (If not specified $T_c=25^\circ\text{C}$ )

| Item               | Symbol        | Conditions                           | Ratings  | Unit                      |
|--------------------|---------------|--------------------------------------|----------|---------------------------|
| Forward Voltage    | $V_F$         | $I_F=25\text{A}$ , Pulse measurement | Max 1.10 | V                         |
| Reverse Current    | $I_R$         | $V_R=V_{RM}$ , Pulse measurement     | Max 10   | $\mu\text{A}$             |
| Thermal Resistance | $\theta_{jc}$ | junction to case                     | Max 0.5  | $^\circ\text{C}/\text{W}$ |

## DF25V60 Forward Voltage



## DF25V60 Forward Power Dissipation



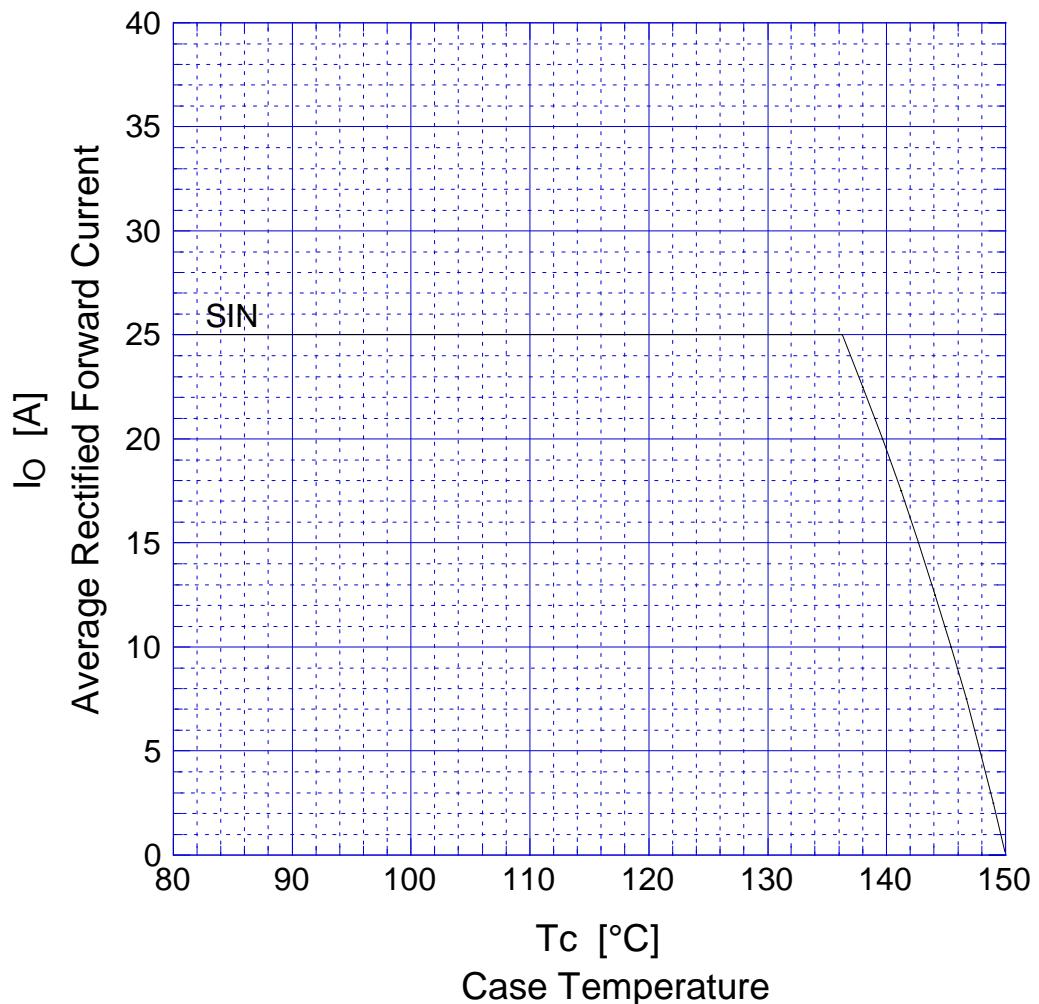
Average Rectified Forward Current

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

sine wave

DF25V60

Derating Curve



$V_R = V_{RM}$   
sine wave  
R - Load  
with heatsink

# DF25V60

## Peak Surge Forward Capability

