

# SHINDENGEN

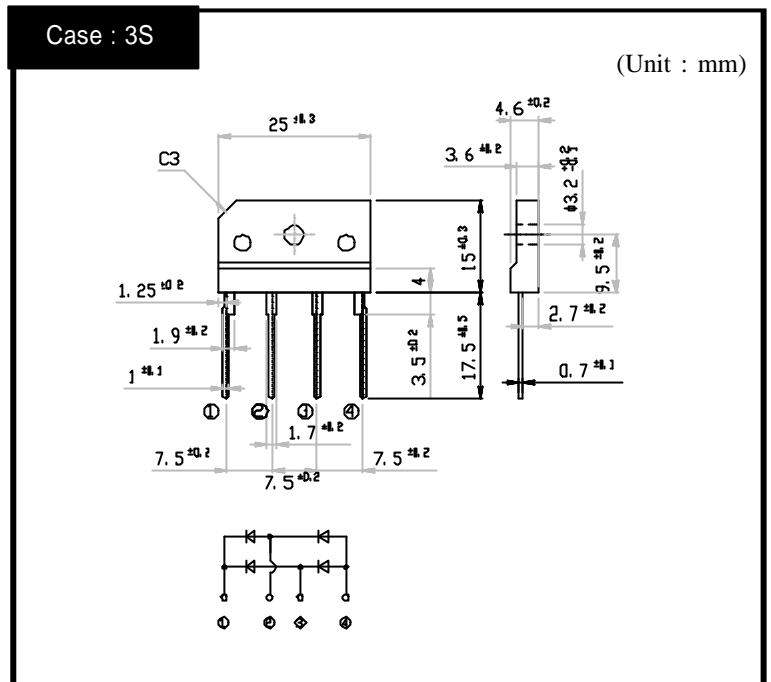
## General Purpose Rectifiers

## SIL Bridges

# D4SB60L

## 600V 4A

### OUTLINE DIMENSIONS



### RATINGS

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

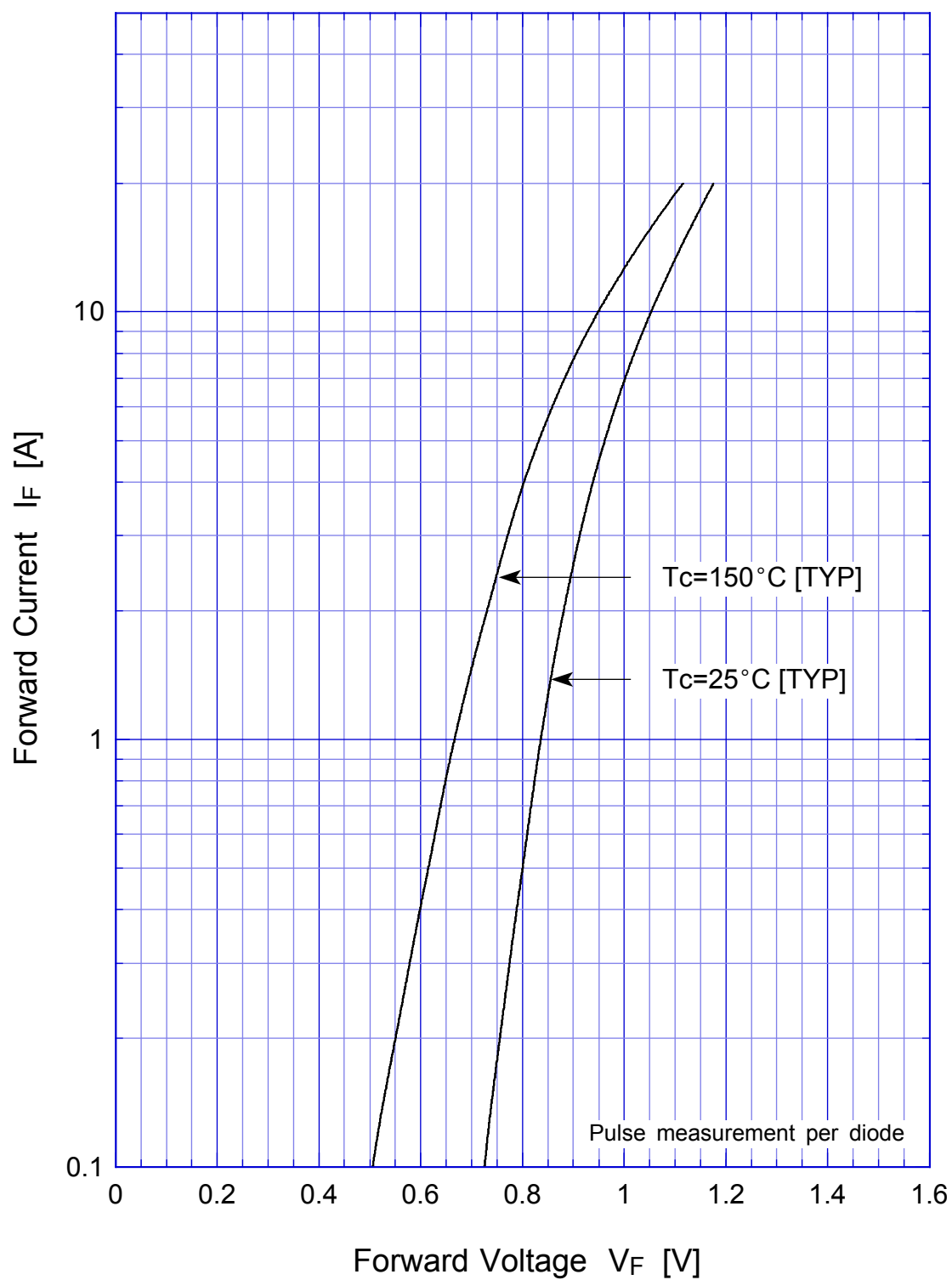
| Item                              | Symbol    | Conditions   | Ratings   | Unit   |
|-----------------------------------|-----------|--|-----------|--------|
| Storage Temperature               | $T_{stg}$ |  | -40 ~ 150 |        |
| Operating Junction Temperature    | $T_j$     |  | 150       |        |
| Maximum Reverse Voltage           | $V_{RM}$  |  | 600       | V      |
| Average Rectified Forward Current | $I_O$     | 50Hz sine wave, R-load With heatsink $T_c=111$             | 4         | A      |
|                                   |           | 50Hz sine wave, R-load Without heatsink $T_a=25$           | 2.5       |        |
| Peak Surge Forward Current        | $I_{FSM}$ | 50Hz sine wave, Non-repetitive 1cycle peak value, $T_j=25$ | 150       | A      |
| Current Squared Time              | $I^2t$    | 2ms $t < 10ms$ $T_j = 25$                                  | 80        | $A^2s$ |
| Dielectric Strength               | $V_{dis}$ | Terminals to case, AC 1 minute                             | 2         | kV     |
| Mounting Torque                   | TOR       | (Recommended torque : 0.5N·m )                             | 0.8       | N·m    |

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

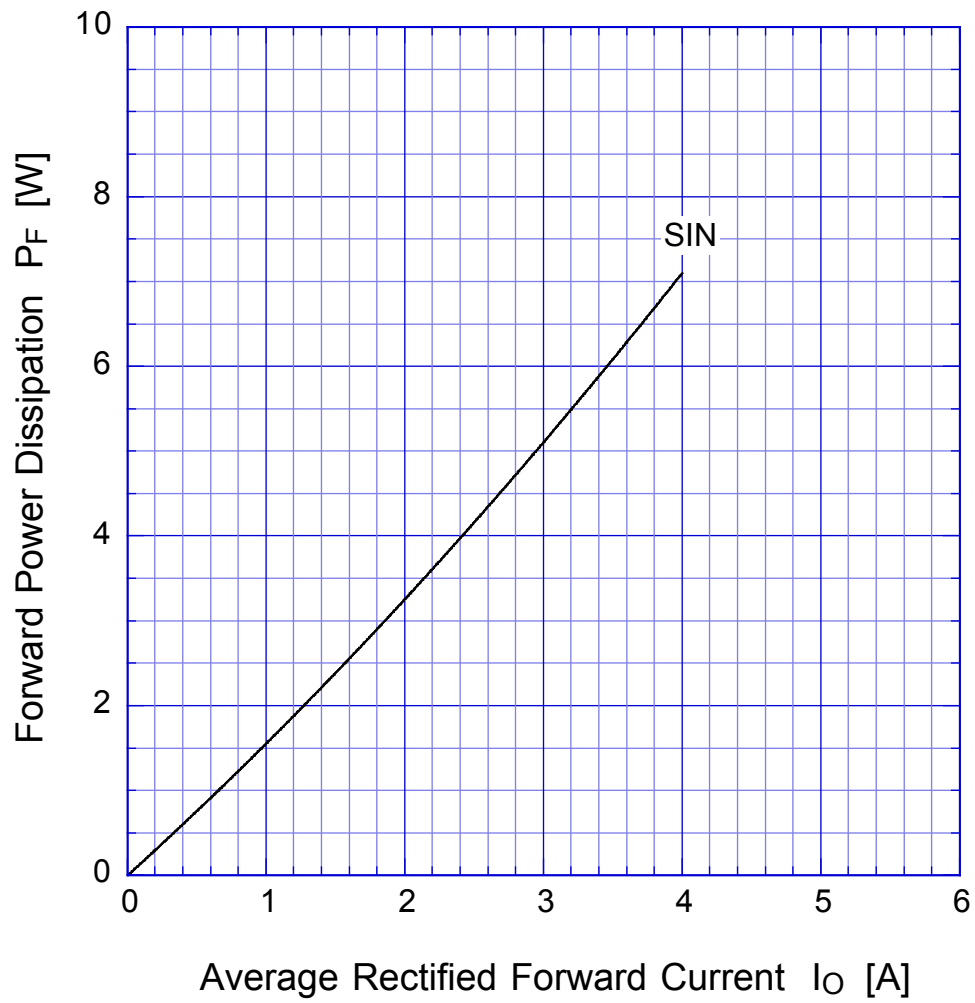
| Item                  | Symbol        | Conditions  | Ratings  | Unit    |
|-----------------------|---------------|---|----------|---------|
| Forward Voltage       | $V_F$         | $I_F=2A$ , Pulse measurement, Rating of per diode     | Max.0.95 | V       |
| Reverse Current       | $I_R$         | $V_R=V_{RM}$ , Pulse measurement, Rating of per diode | Max.10   | $\mu A$ |
| Reverse Recovery Time | $t_{rr}$      | $I_F=0.1A$ , $I_R=0.1A$ , Rating of per diode         | Max.10   | $\mu s$ |
| Thermal Resistance    | $\theta_{jc}$ | junction to case With heatsink                        | Max.5.5  | /W      |
|                       | $\theta_{jl}$ | junction to lead Without heatsink                     | Max.6    |         |
|                       | $\theta_{ja}$ | junction to ambient Without heatsink                  | Max.30   |         |

# D4SB60L

## Forward Voltage



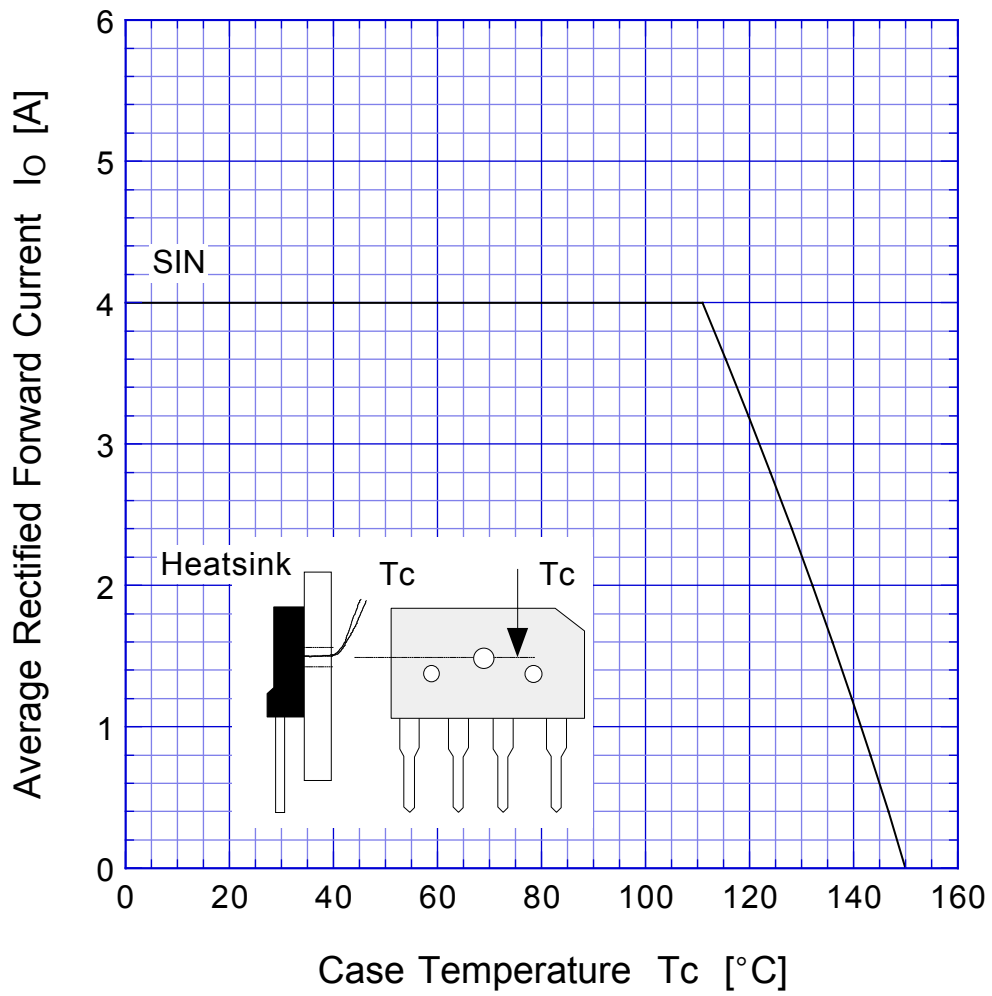
## D4SB60L Forward Power Dissipation



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

# D4SB60L

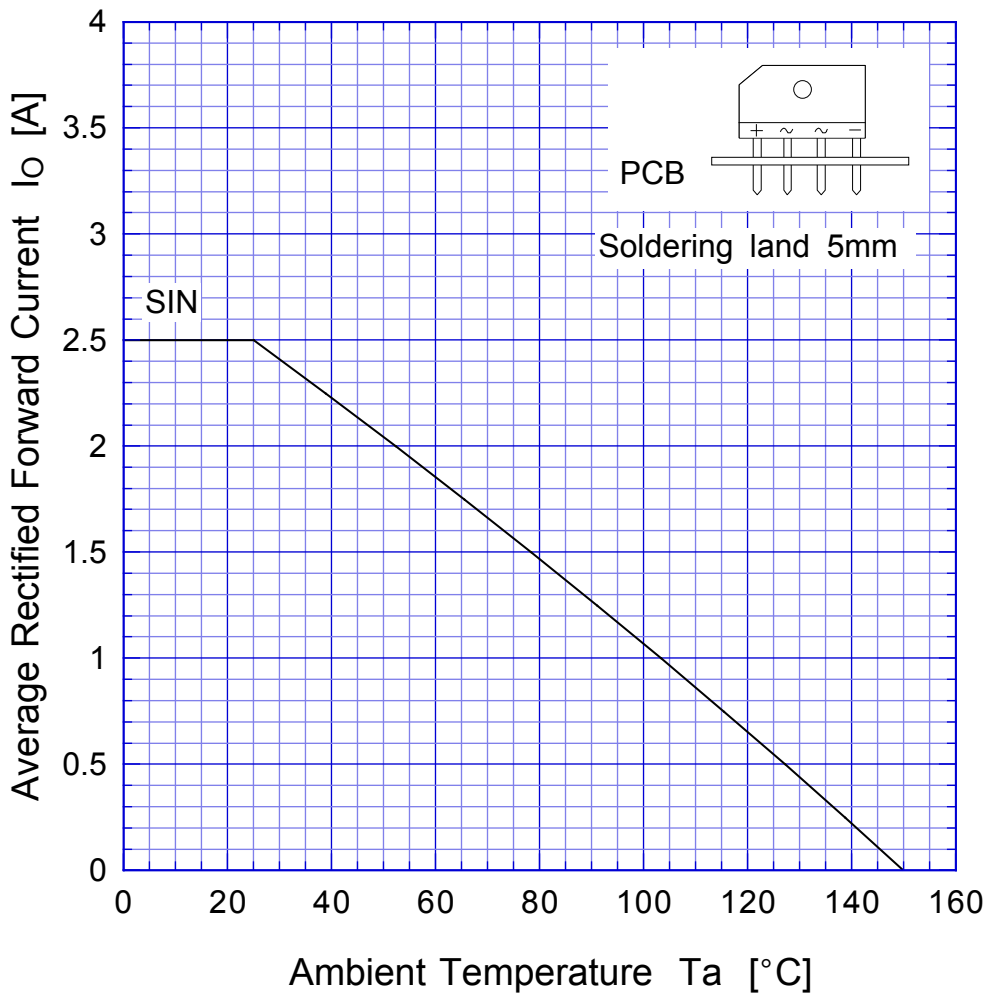
# Derating Curve



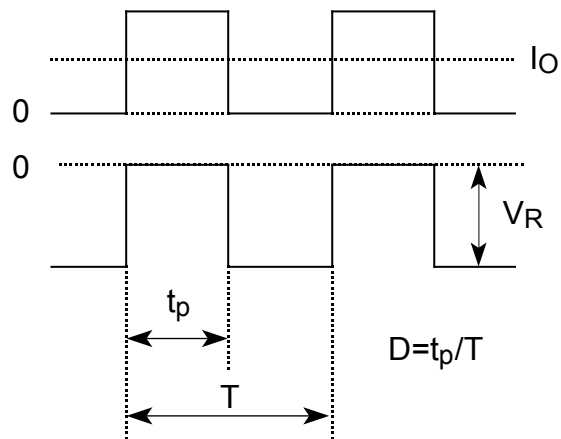
Sine wave  
R-load  
with heatsink

# D4SB60L

# Derating Curve



$V_R = 600V$



# D4SB60L

## Peak Surge Forward Capability

