

SHINDENGEN

General Purpose Rectifiers

Single

S3V60

600V 3.5A

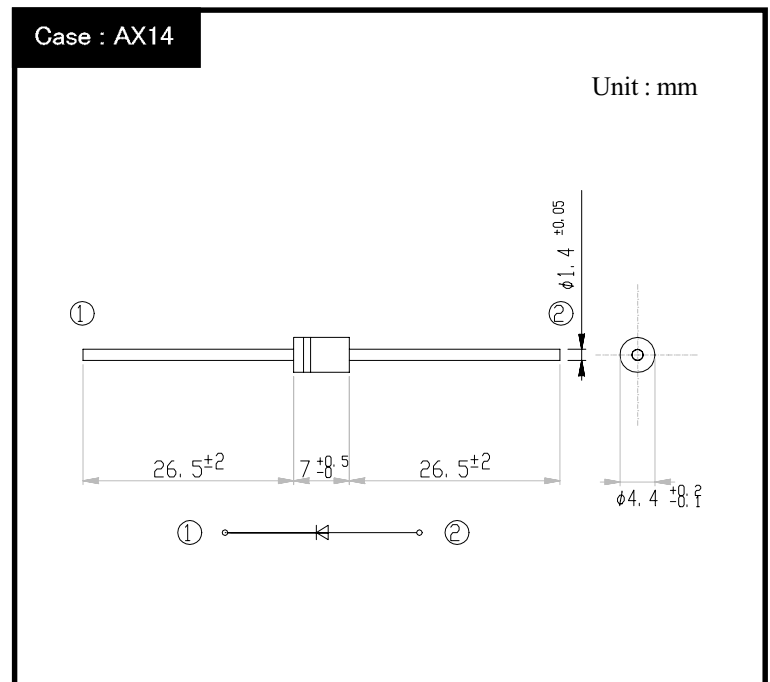
FEATURES

- High voltage
- High reliability with superior moisture resistance
- Applicable to Automatic Insertion

APPLICATION

- Conventional Rectification
- Power source(Power Supply)
- Home Appliances, Office Equipment
- Telecommunication, Factory Automation

OUTLINE DIMENSIONS



RATINGS

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

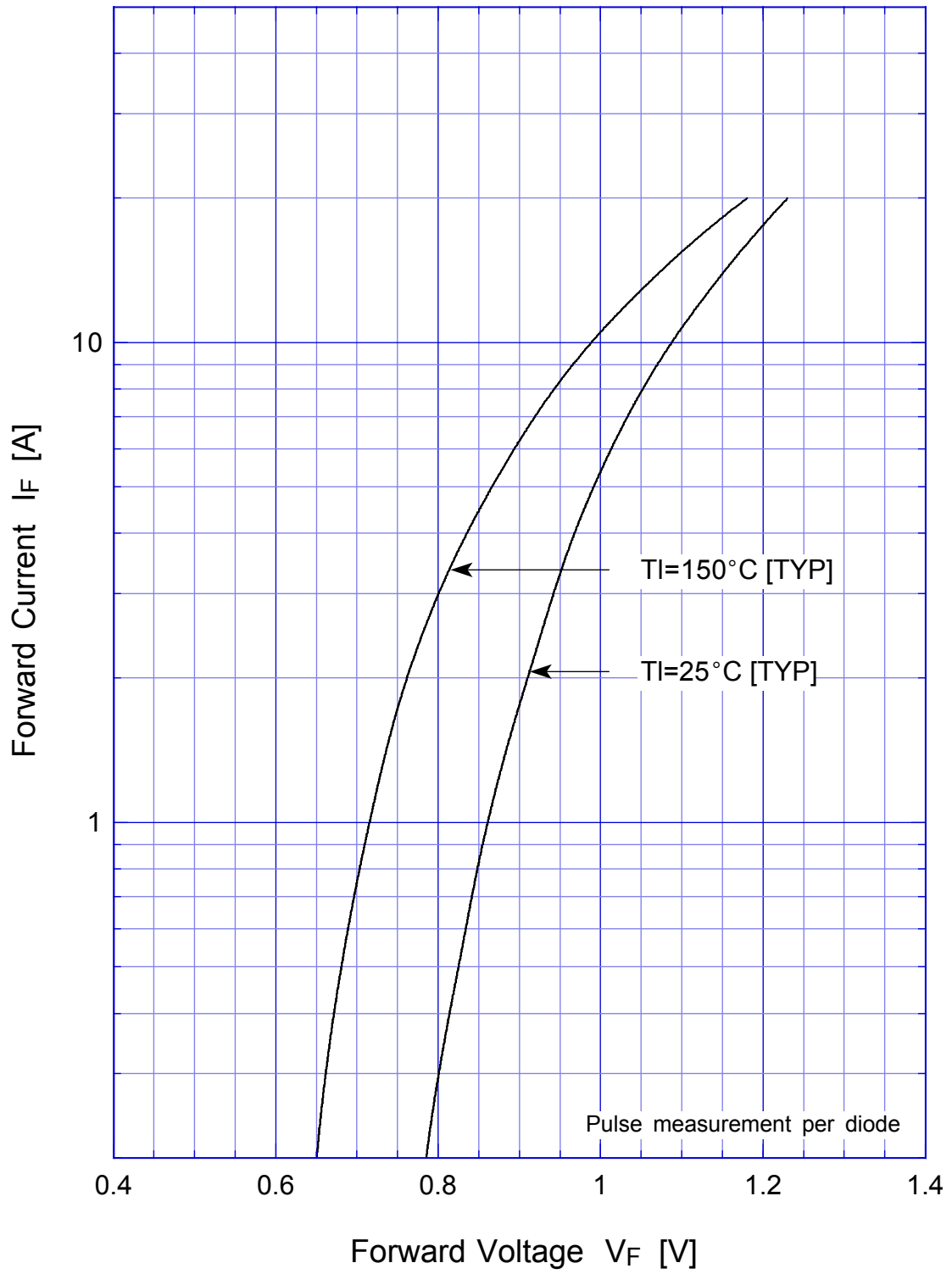
| Item | Symbol | Conditions | Ratings | Unit |
|-----------------------------------|-----------|---|-----------|----------------------|
| Storage Temperature | T_{stg} | | -55 ~ 150 | $^{\circ}\text{C}$ |
| Operating Junction Temperature | T_j | | 150 | $^{\circ}\text{C}$ |
| Maximum Reverse Voltage | V_{RM} | | 600 | V |
| Average Rectified Forward Current | I_o | 50Hz sine wave, R-load, $T_a=40^{\circ}\text{C}$ With $20 \times 20 \times 1\text{mm}$ copper plate | 3.5 | A |
| | | 50Hz sine wave, R-load, $T_a=40^{\circ}\text{C}$ Without heatsink | 2.6 | |
| Peak Surge Forward Current | I_{FSM} | 50Hz sine wave, Non-repetitive 1cycle peak value, $T_j=25^{\circ}\text{C}$ | 120 | A |
| Current Squared Time | I^2t | $1\text{ms} \leq t < 10\text{ms}$ $T_j=25^{\circ}\text{C}$ | 60 | A^2s |

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

| Item | Symbol | Conditions | Ratings | Unit |
|--------------------|---------------|-------------------------------------|-----------|-----------------------------|
| Forward Voltage | V_F | $I_F=2.6\text{A}$ Pulse measurement | Max. 1.05 | V |
| Reverse Current | I_R | $V_R=V_{RM}$ Pulse measurement | Max. 10 | μA |
| Thermal Resistance | θ_{jl} | junction to lead | Max. 6.5 | $^{\circ}\text{C}/\text{W}$ |

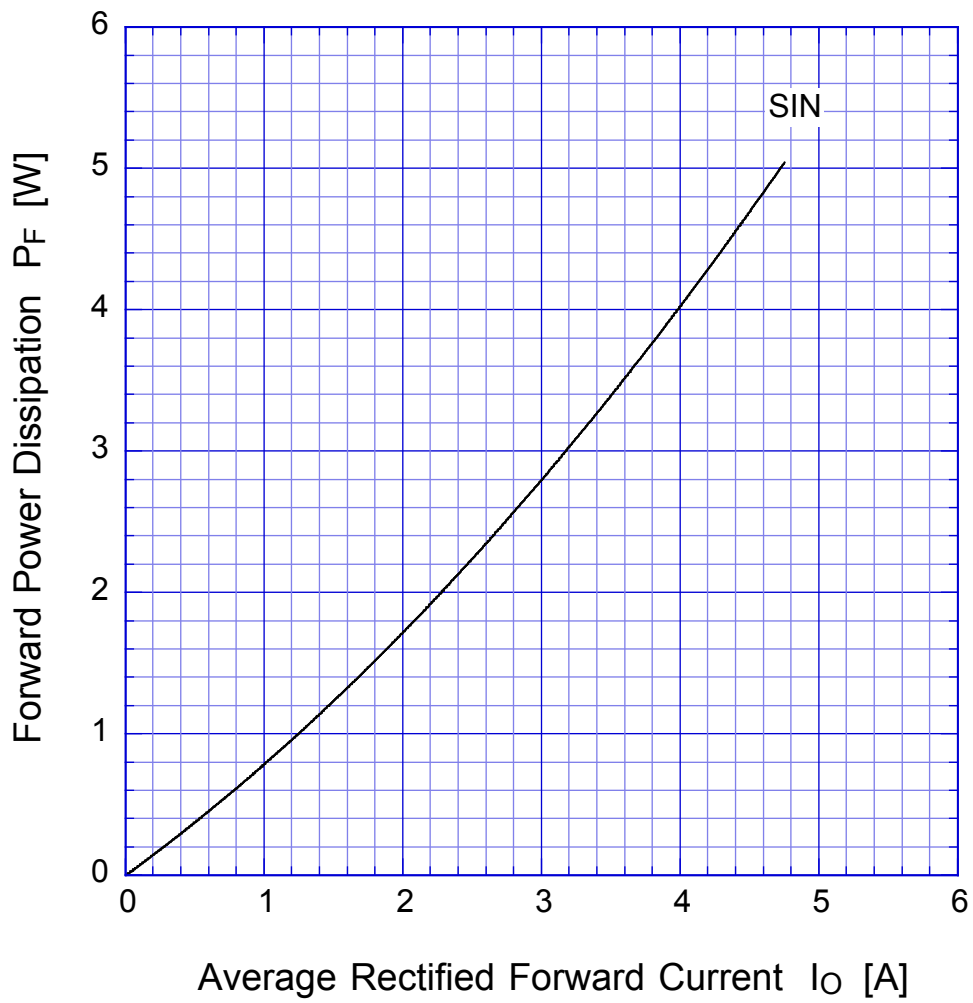
S3Vx

Forward Voltage



S3Vx

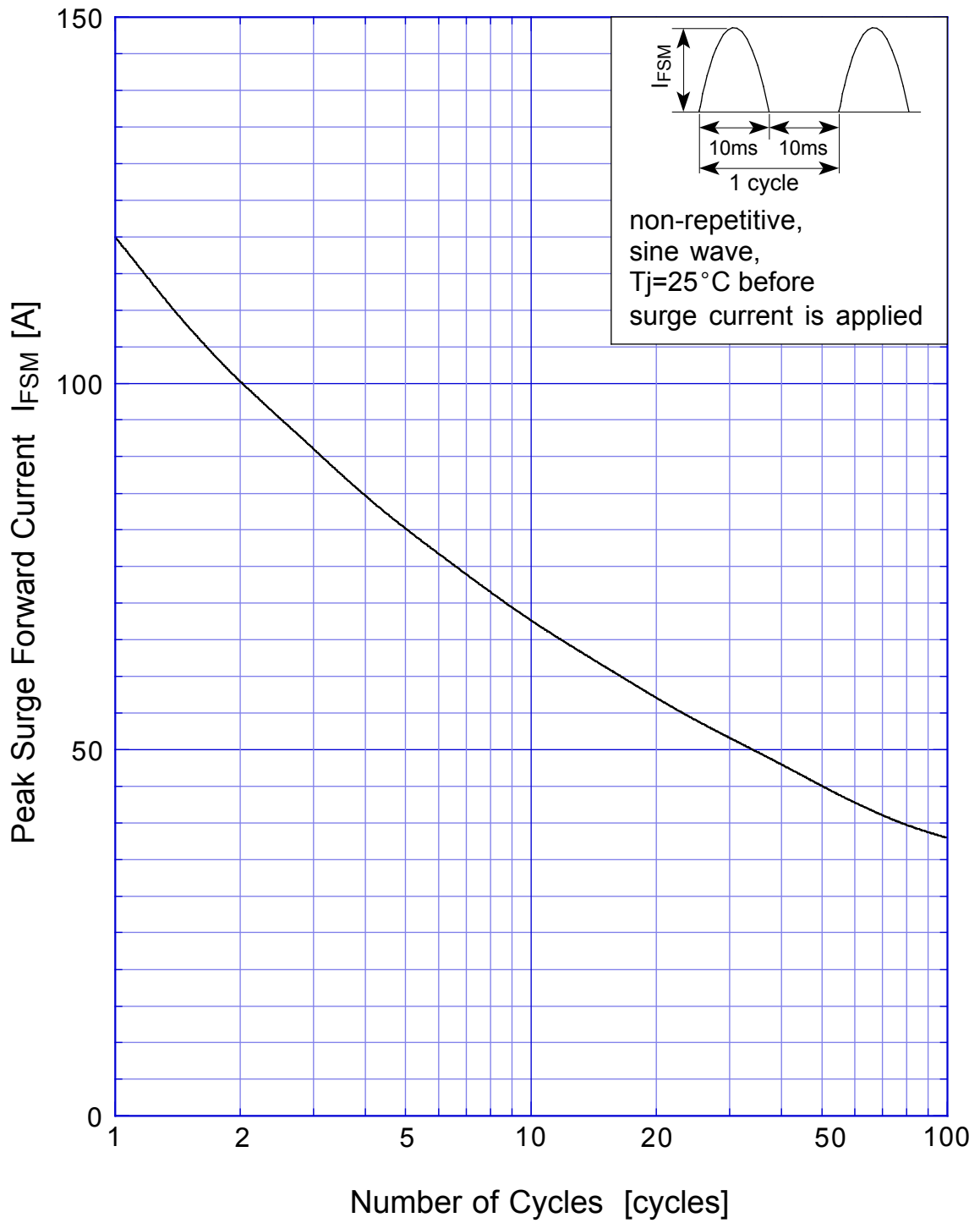
Forward Power Dissipation



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

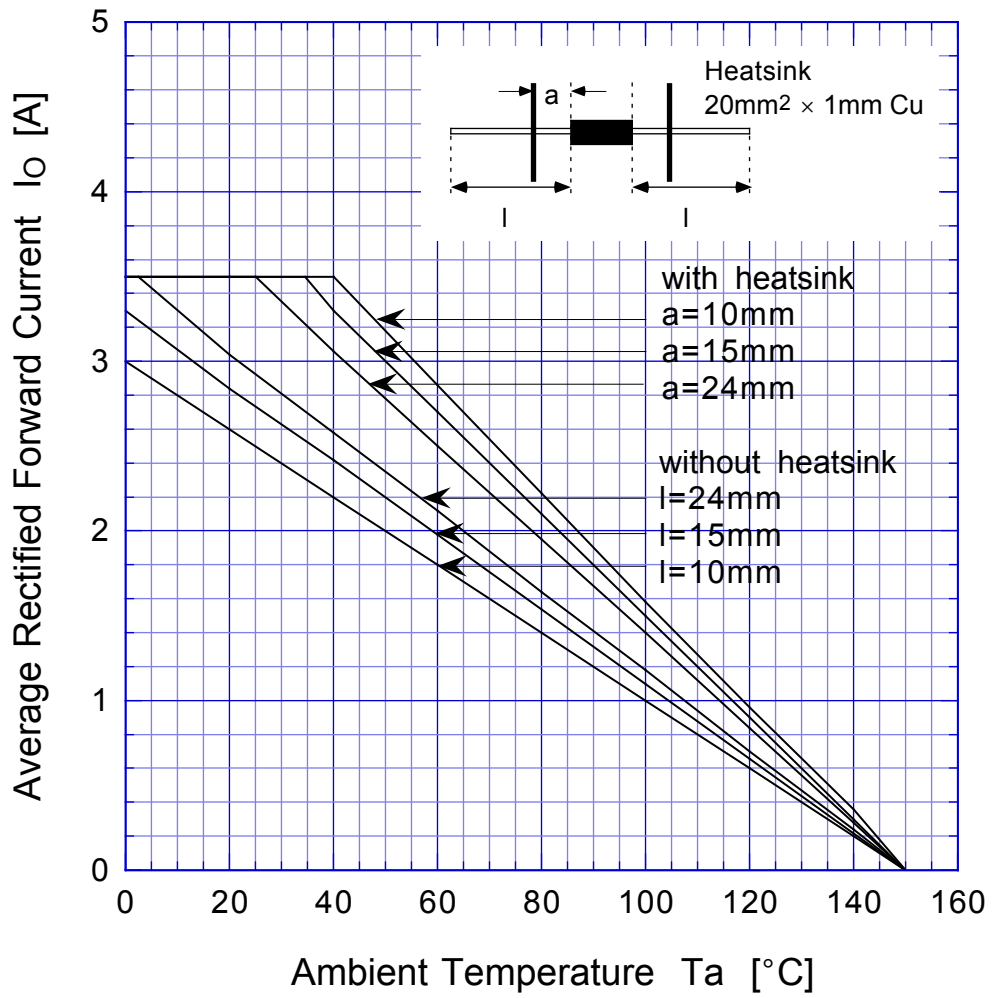
S3Vx

Peak Surge Forward Capability



S3Vx

Derating Curve



Sine wave
R-load
Free in air