

# SHINDENGEN

## General Purpose Rectifiers

## 3 Phase Bridge Modules

# S15VTA80

## 800V 15A

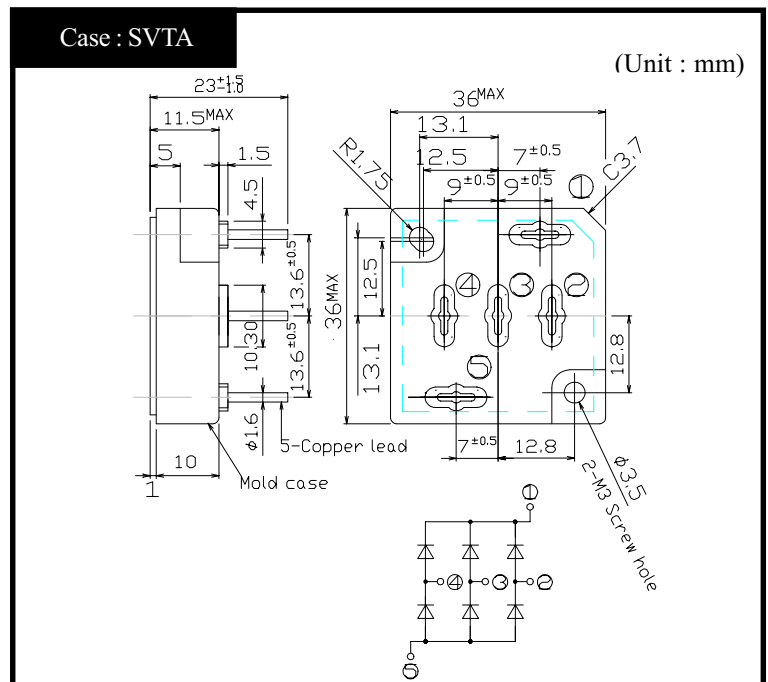
### FEATURES

- Dual In-Line Package
- Compact 3 phase bridge
- High IFSM
- Applicable to mount on glass-epoxy substrate (VTA type)

### APPLICATION

- Big Power Supply
- Air conditioner
- Factory Automation, Inverter

### OUTLINE DIMENSIONS



### RATINGS

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

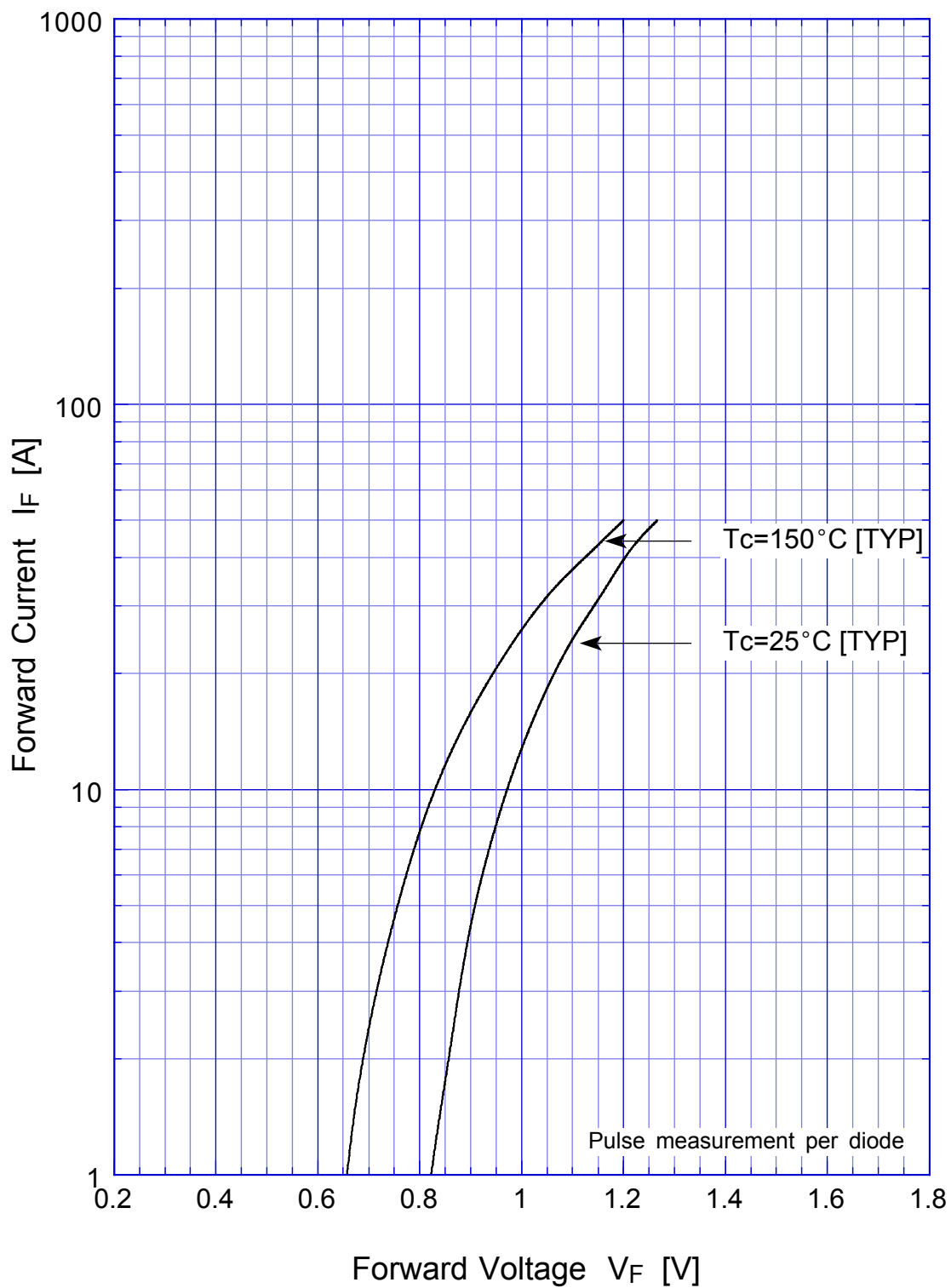
| Item                              | Symbol    | Conditions  | Ratings | Unit                    |
|-----------------------------------|-----------|---|---------|-------------------------|
| Storage Temperature               | $T_{stg}$ |   | -40~150 | $^\circ\text{C}$        |
| Operating Junction Temperature    | $T_j$     |   | 150     | $^\circ\text{C}$        |
| Maximum Reverse Voltage           | $V_{RM}$  |   | 800     | V                       |
| Average Rectified Forward Current | $I_O$     | 50Hz sine wave, R-load, With heatsink, $T_c=132^\circ\text{C}$                                | 15      | A                       |
| Peak Surge Forward Current        | $I_{FSM}$ | 50Hz sine wave, Non-repetitive 1cycle peak value, Rating of per diode, $T_j=25^\circ\text{C}$ | 200     | A                       |
| Current Squared Time              | $I^2t$    | $1\text{ms} \leq t < 10\text{ms}$ $T_j=25^\circ\text{C}$                                      | 160     | $\text{A}^2\text{s}$    |
| Dielectric Strength               | $V_{dis}$ | Terminals to case, AC 1 minute  | 2       | kV                      |
| Mounting Torque                   | TOR       | ( Recommended torque : $0.6\text{N}\cdot\text{m}$ )   | 0.8     | $\text{N}\cdot\text{m}$ |

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

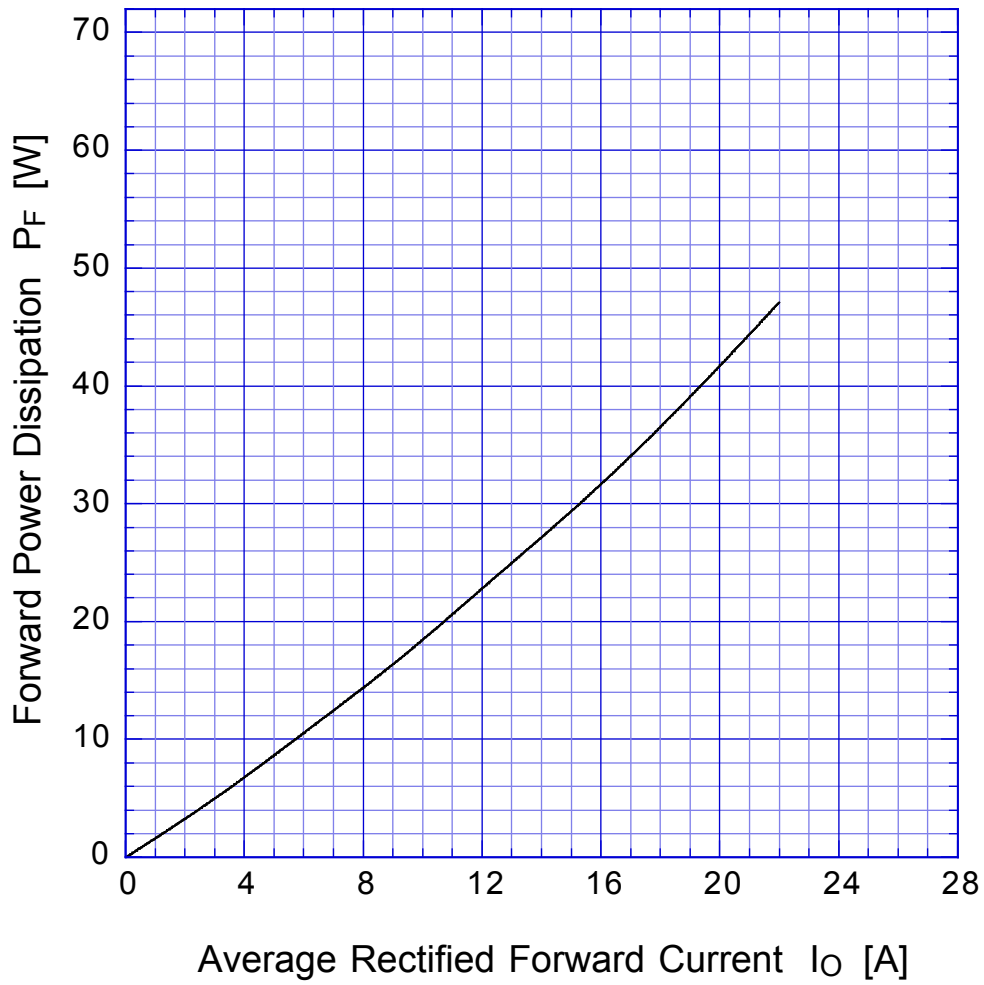
| Item               | Symbol        | Conditions   | Ratings  | Unit                      |
|--------------------|---------------|--|----------|---------------------------|
| Forward Voltage    | $V_F$         | $I_F=5\text{A}$ , Pulse measurement, Rating of per diode | Max.1.05 | V                         |
| Reverse Current    | $I_R$         | $V_R=V_{RM}$ , Pulse measurement, Rating of per diode    | Max.10   | $\mu\text{A}$             |
| Thermal Resistance | $\theta_{jc}$ | junction to case   | Max.0.6  | $^\circ\text{C}/\text{W}$ |

# S15VTAx

## Forward Voltage



## S15VTAx Forward Power Dissipation



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

# S15VTAx

## Peak Surge Forward Capability

