# SHINDENGEN

## General Purpose Rectifiers

**3 Phase Bridge Modules**

# S30VTA160

**1600V 30A**

## FEATURES

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

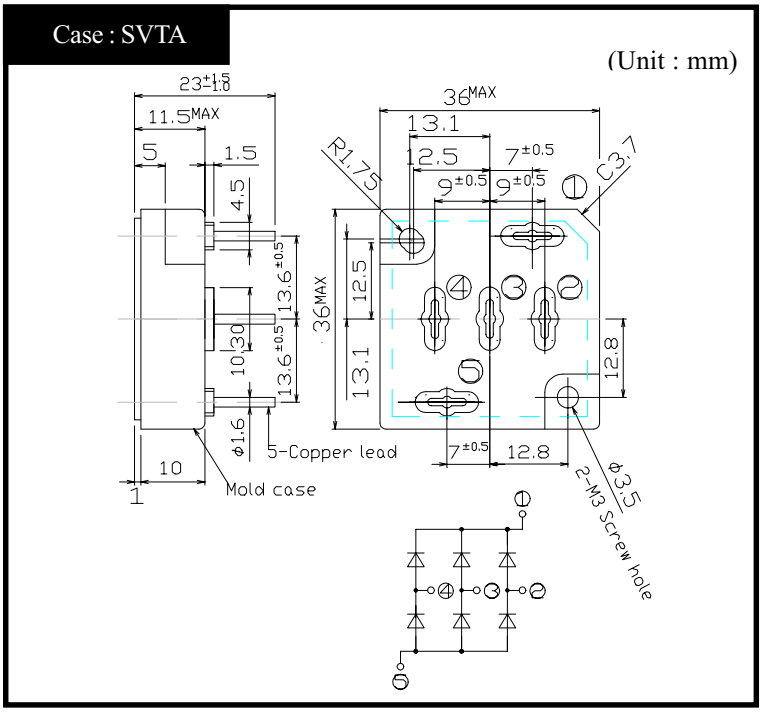
## APPLICATION

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

## OUTLINE DIMENSIONS

Case : SVTA

(Unit : mm)




## RATINGS

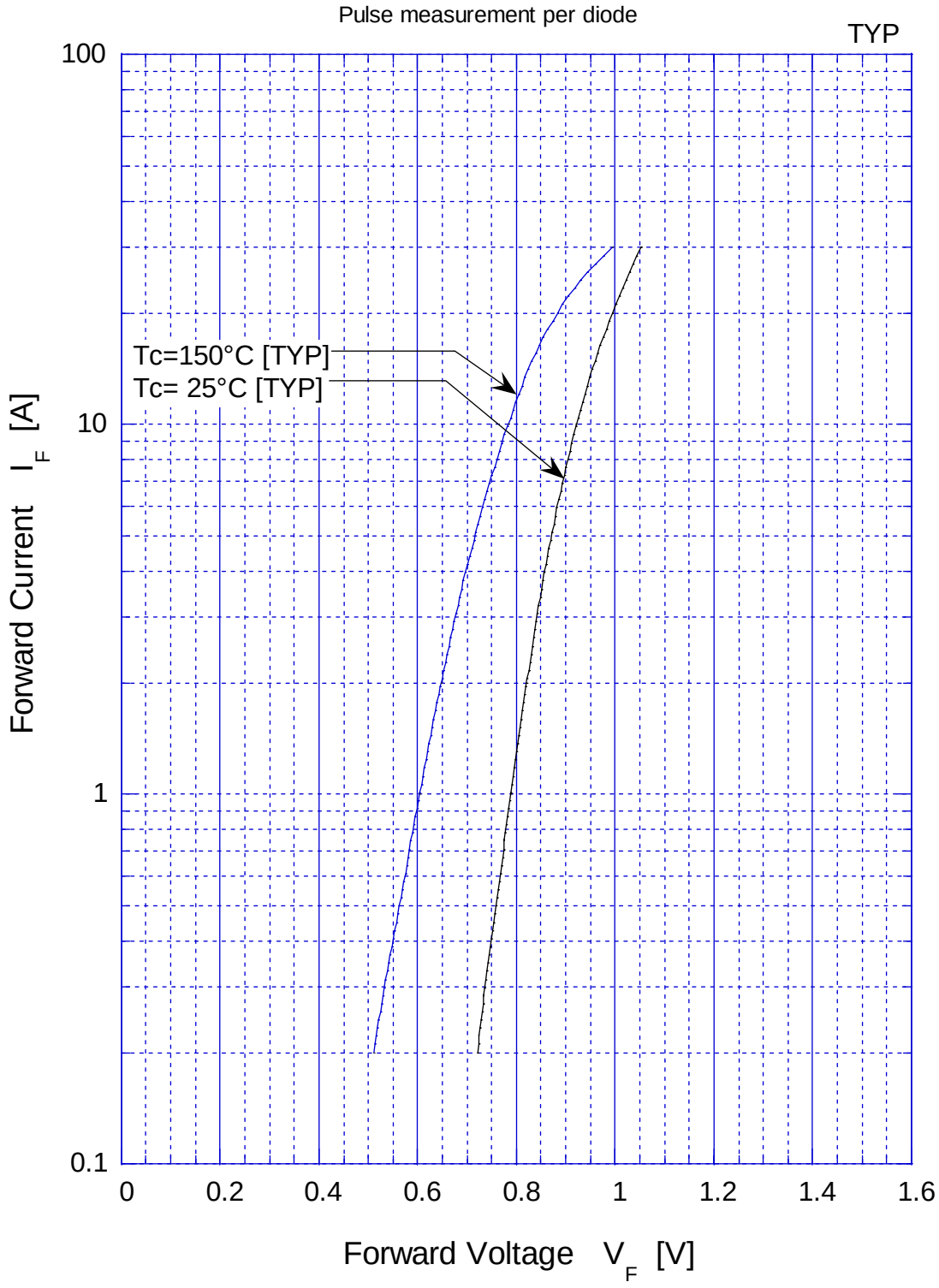
● Absolute Maximum Ratings (If not specified Tc=25℃)

| Item | Symbol | Conditions | Ratings | Unit |
|---|---|---|---|---|
| Storage Temperature | Tstg | | -40～150 | ℃ |
| Operating Junction Temperature | Tj | | 150 | ℃ |
| Maximum Reverse Voltage | $V_{RM}$ | | 1600 | V |
| Average Rectified Forward Current | $I_O$ | 50Hz sine wave, R-load With heatsink Tc=116℃ | 30 | A |
| Peak Surge Forward Current | $I_{FSM}$ | 50Hz sine wave, Non-repetitive 1cycle peak value, Rating of per arm Tj=25℃ | 350 | A |
| Current Squared Time | $I^2t$ | 1ms≦t＜10ms Tj=25℃ | 300 | $A^2s$ |
| Dielectric Strength | Vdis | Terminals to case, AC 1 minute | 2 | kV |
| Mounting Torque | TOR | ( Recommended torque : 0.6N･m) | 0.8 | N･m |

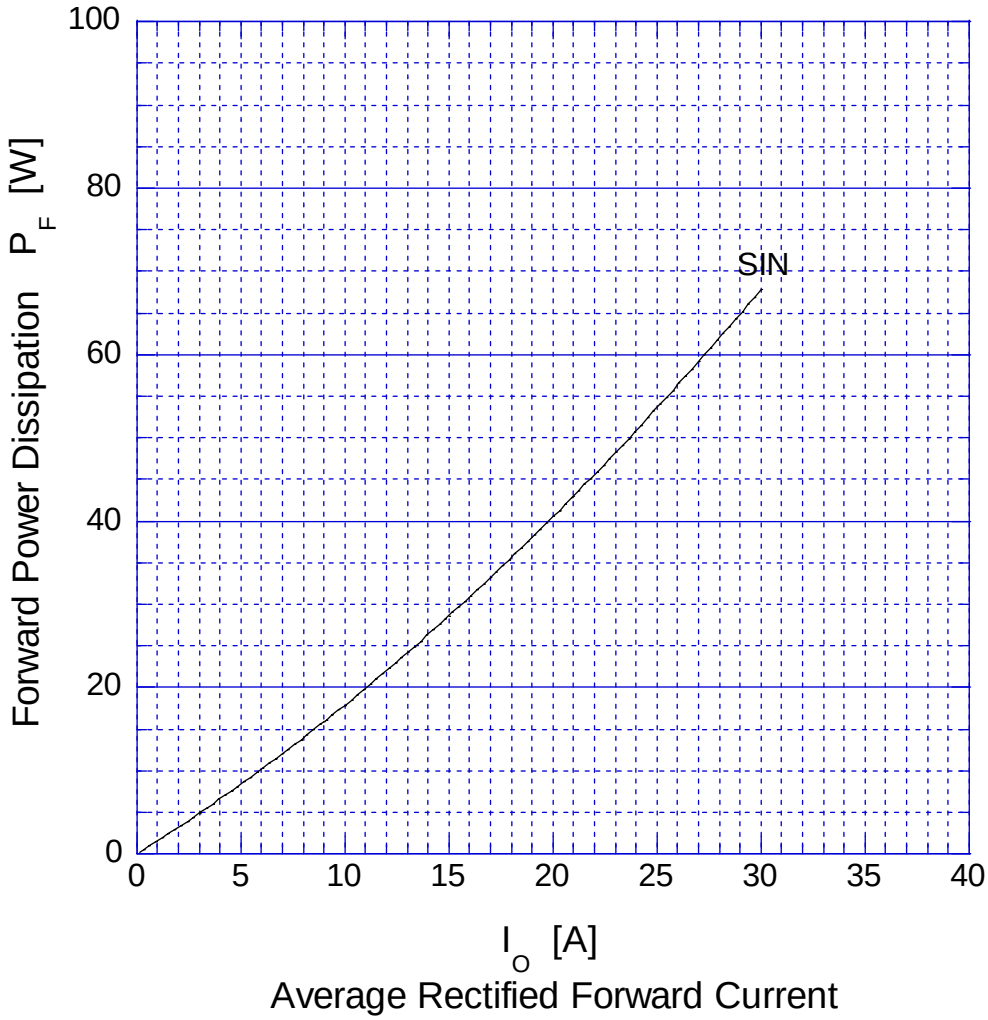
● Electrical Characteristics (If not specified Tc=25℃)

| Item | Symbol | Conditions | Ratings | Unit |
|---|---|---|---|---|
| Forward Voltage | $V_F$ | IF=10A, Pulse measurement, Rating of per arm | Max.1.05 | V |
| Reverse Current | $I_R$ | $V_R=V_{RM}$, Pulse measurement, Rating of per arm | Max.100 | μA |
| Thermal Resistance | θjc | junction to case | Max.0.5 | ℃/W |

# S30VTA160 Forward Voltage

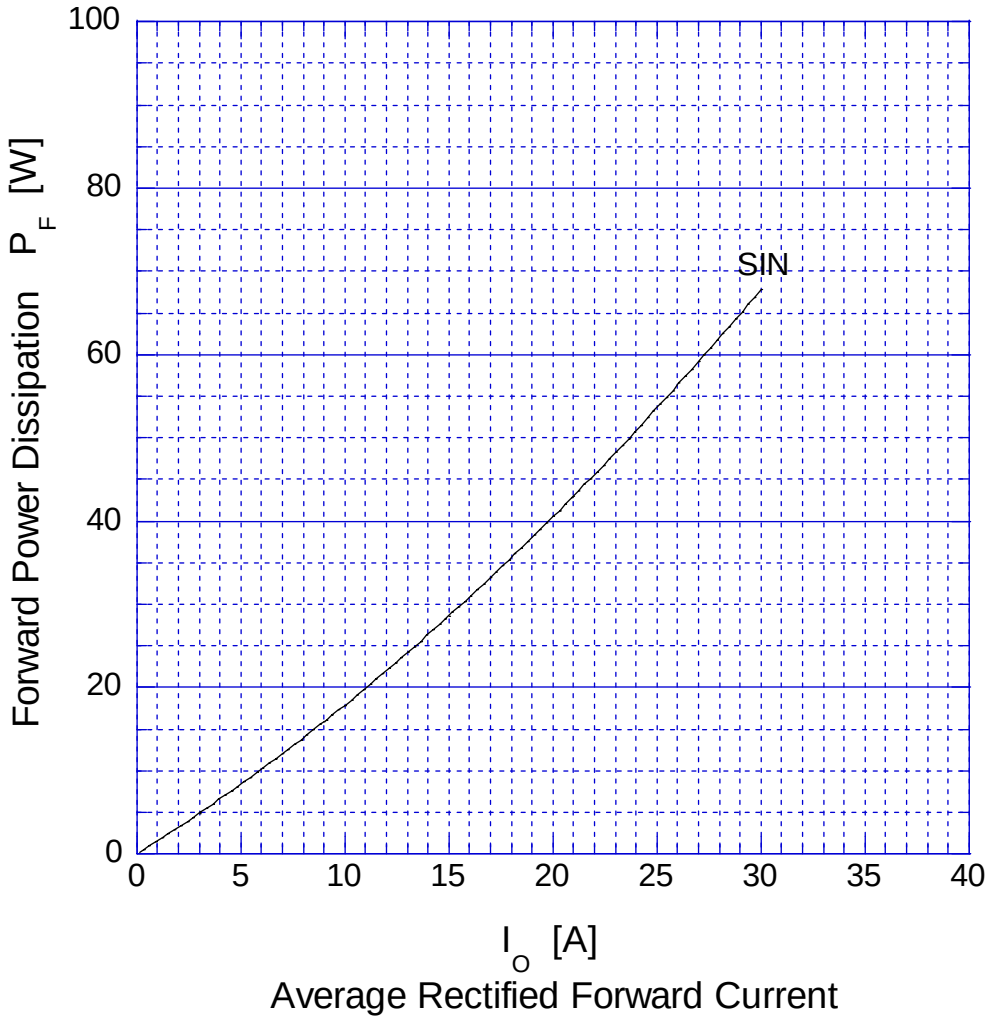


# S30VTA160 Forward Power Dissipation



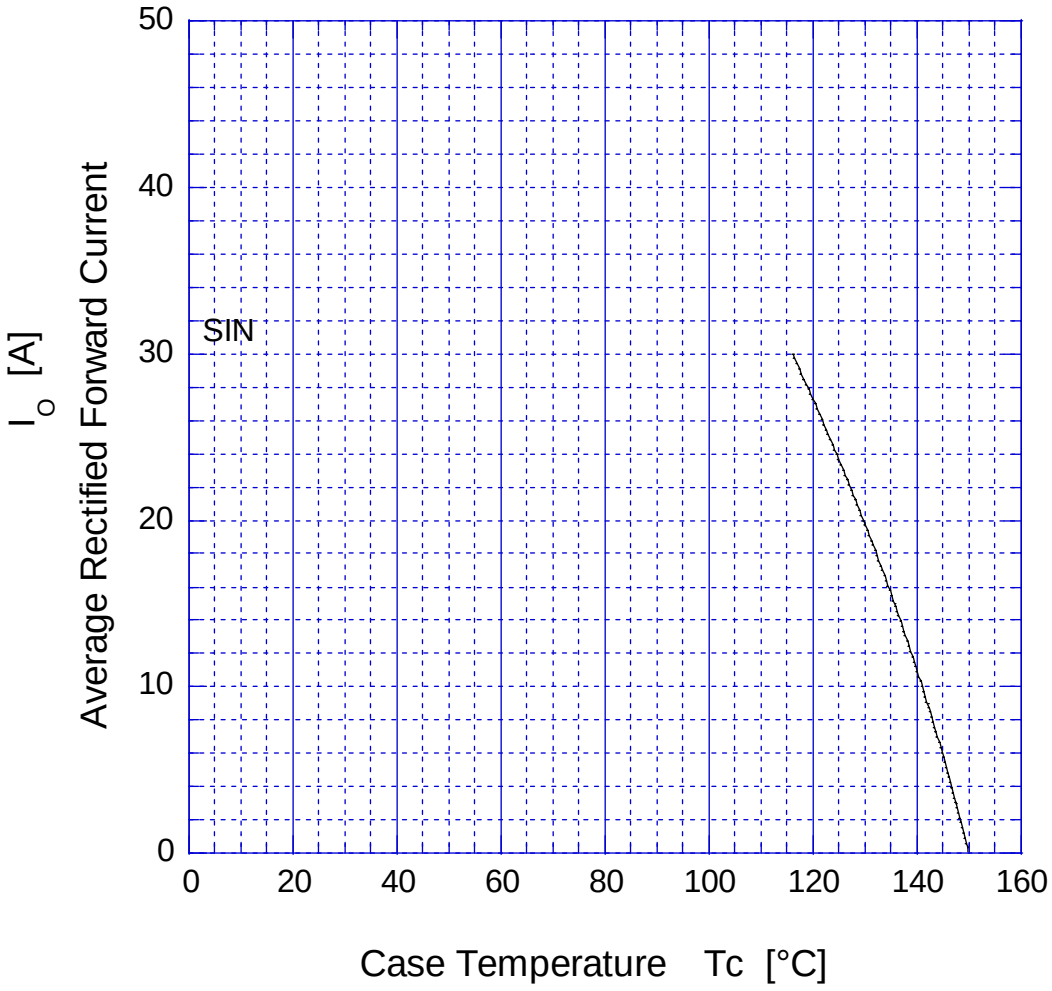

Sine wave
R - load
Tj = 150°C

# S30VTA160 Forward Power Dissipation




Sine wave
R - load
Tj = 150°C

# S30VTA160 Derating Curve




Sine wave
With heatsink