

# SHINDENGEN

## Super Fast Recovery Rectifiers

Single

# D30L60

## 600V 30A

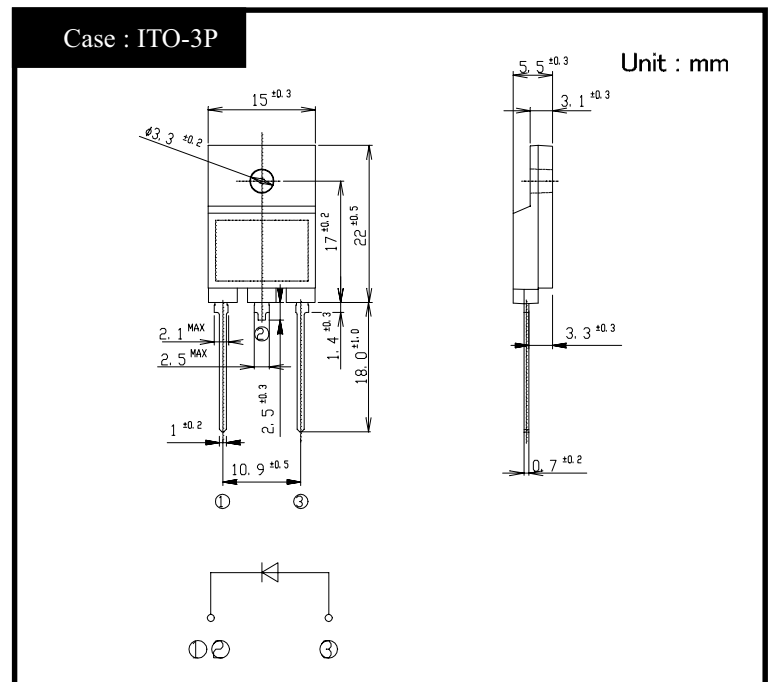
### FEATURES

- Low noise
- trr150ns
- Fully Isolated Molding

### APPLICATION

- Switching power supply
- Free Wheel
- Home Appliances, Office Equipment
- Factory Automation

### OUTLINE DIMENSIONS



### RATINGS

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

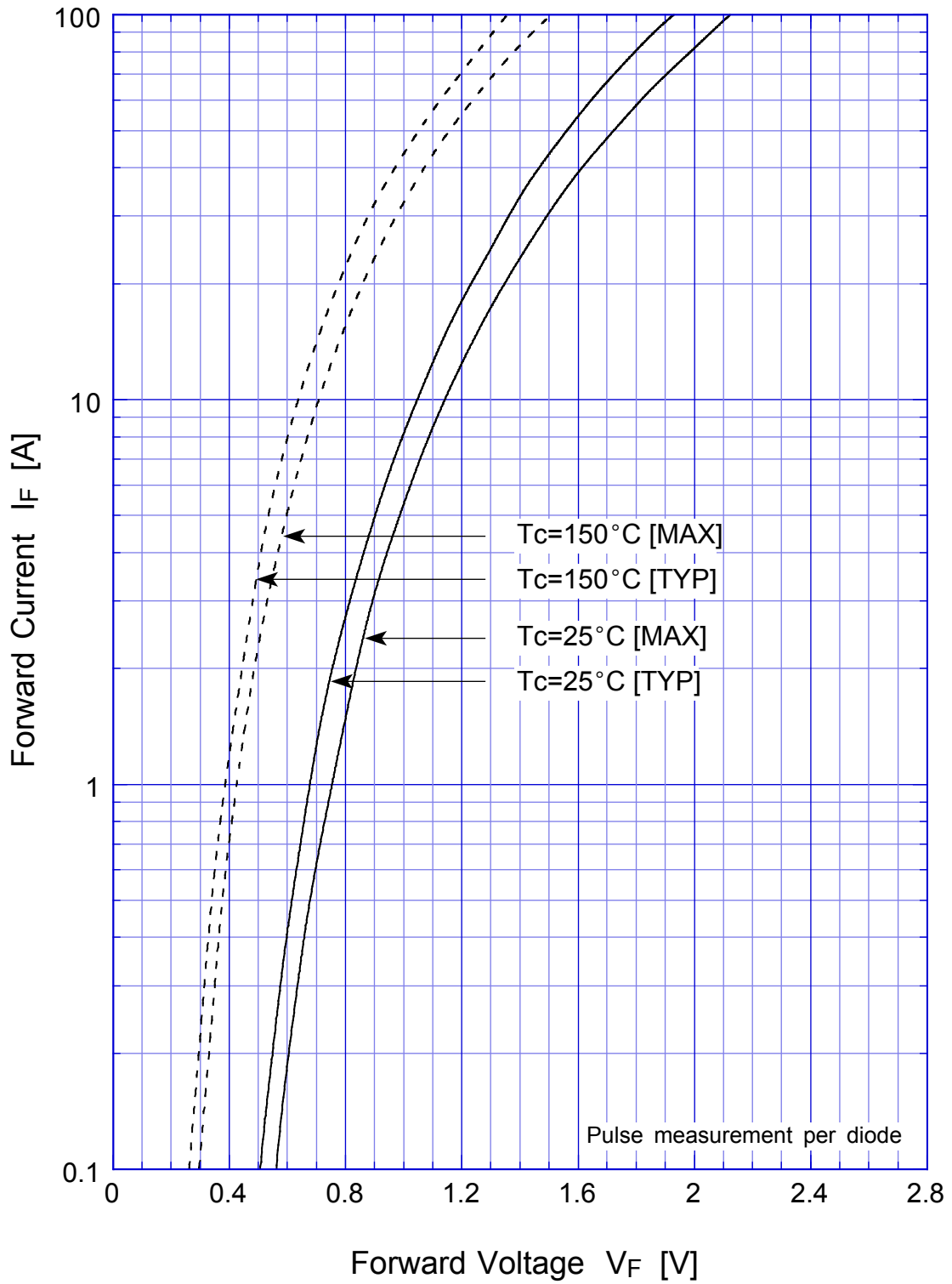
| Item                              | Symbol    | Conditions  | Ratings | Unit             |
|-----------------------------------|-----------|---|---------|------------------|
| Storage Temperature               | $T_{stg}$ |   | -55~150 | $^\circ\text{C}$ |
| Operating Junction Temperature    | $T_j$     |   | 150     | $^\circ\text{C}$ |
| Maximum Reverse Voltage           | $V_{RM}$  |   | 600     | V                |
| Average Rectified Forward Current | $I_o$     | 50Hz sine wave, R-load, $T_c=85^\circ\text{C}$                            | 30      | A                |
| Peak Surge Forward Current        | $I_{FSM}$ | 50Hz sine wave, Non-repetitive 1 cycle peak value, $T_j=25^\circ\text{C}$ | 600     | A                |
| Dielectric Strength               | $V_{dis}$ | Terminals to case, AC 1 minute  | 1.5     | kV               |
| Mounting Torque                   | TOR       | (Recommended torque:0.5N·m)   | 0.8     | N·m              |

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

| Item                  | Symbol        | Conditions                            | Ratings | Unit                      |
|-----------------------|---------------|---------------------------------------|---------|---------------------------|
| Forward Voltage       | $V_F$         | $I_F=30\text{A}$ , Pulse measurement  | Max.1.5 | V                         |
| Reverse Current       | $I_R$         | $V_R=V_{RM}$ , Pulse measurement      | Max.25  | $\mu\text{A}$             |
| Reverse Recovery Time | trr           | $I_F=0.5\text{A}$ , $I_R=1.0\text{A}$ | MAX.150 | ns                        |
| Thermal Resistance    | $\theta_{jc}$ | Junction to case                      | Max.1.4 | $^\circ\text{C}/\text{W}$ |

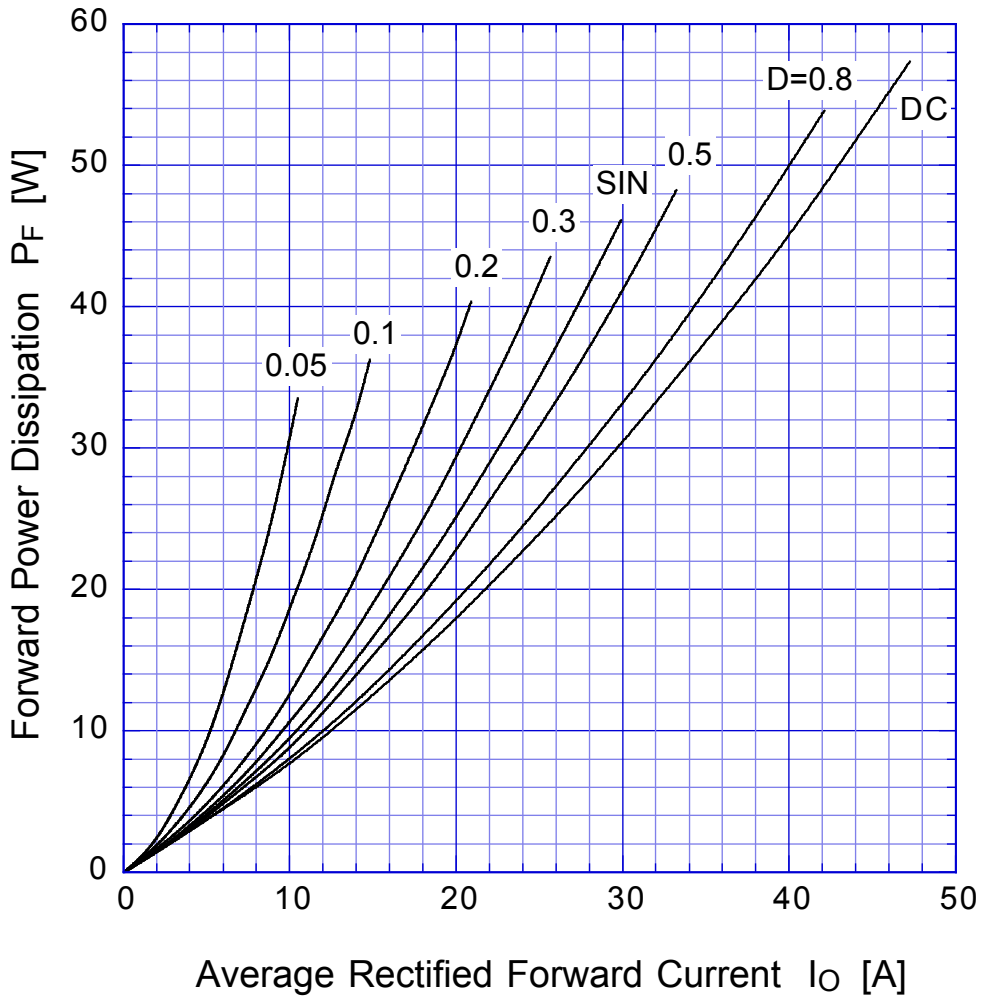
# D30L60

## Forward Voltage

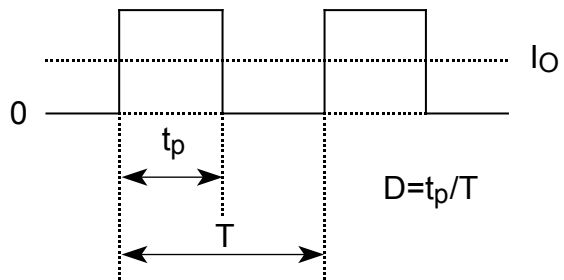


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## Forward Power Dissipation

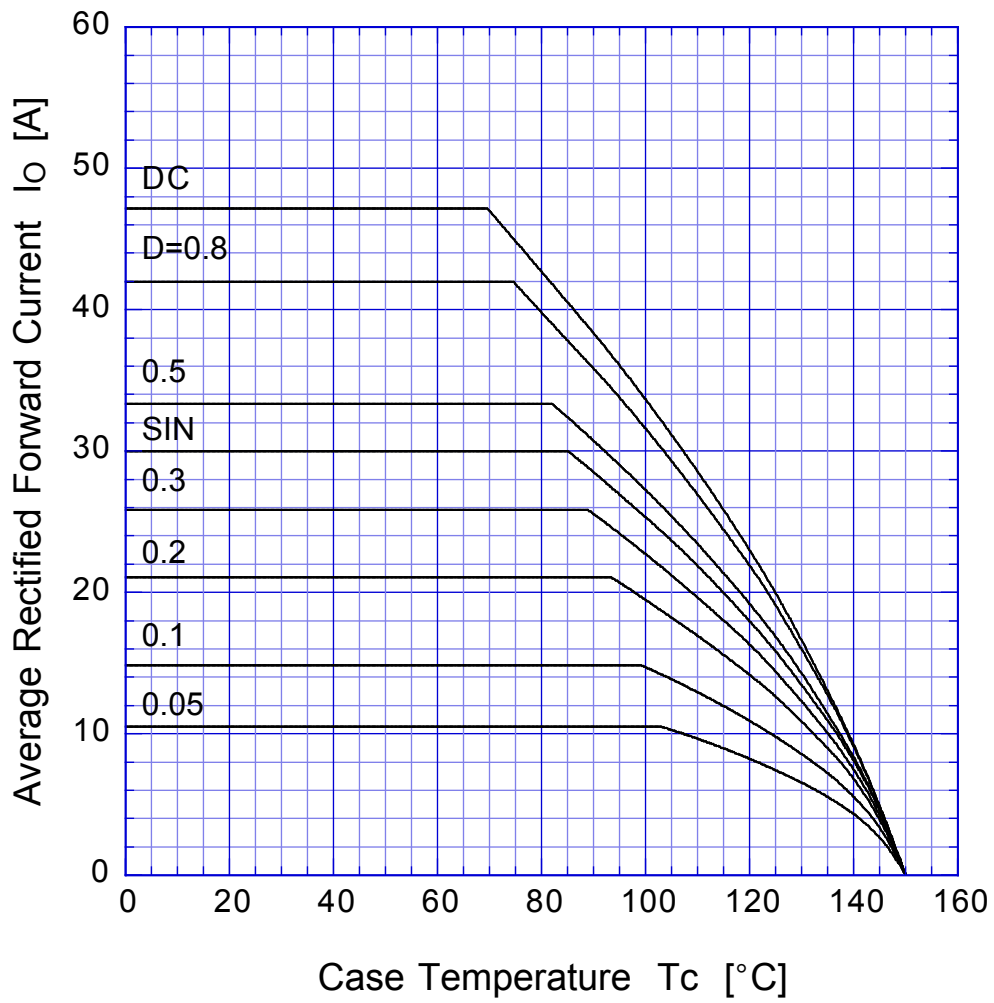


$T_j = 150^\circ\text{C}$



# D30L60

# Derating Curve

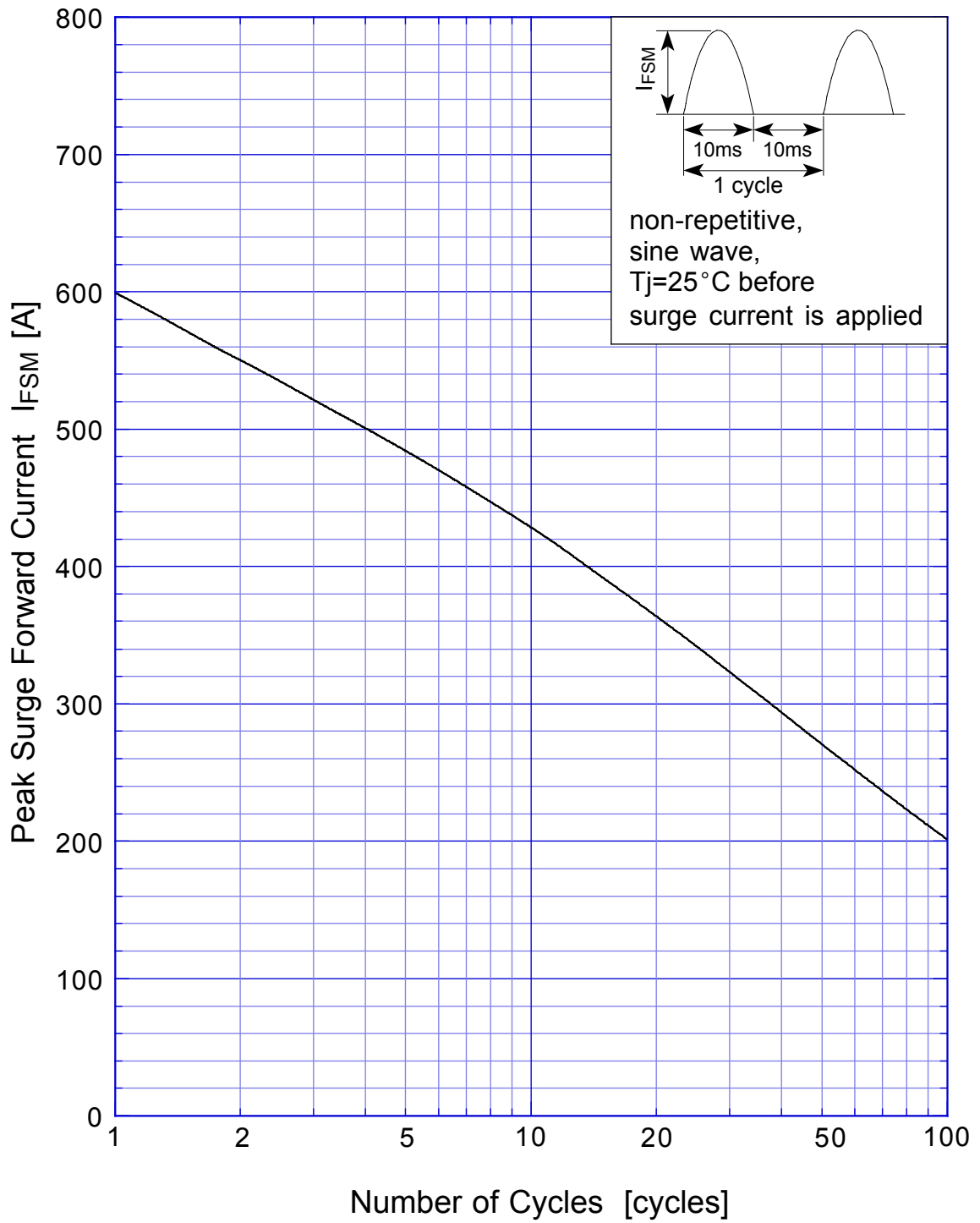


$$V_R = V_{RM}$$



# D30L60

## Peak Surge Forward Capability



# D30L60 Junction Capacitance

