

# SHINDENGEN

## Super Fast Recovery Rectifiers

Dual

# D8LC20UR

## 200V 8A

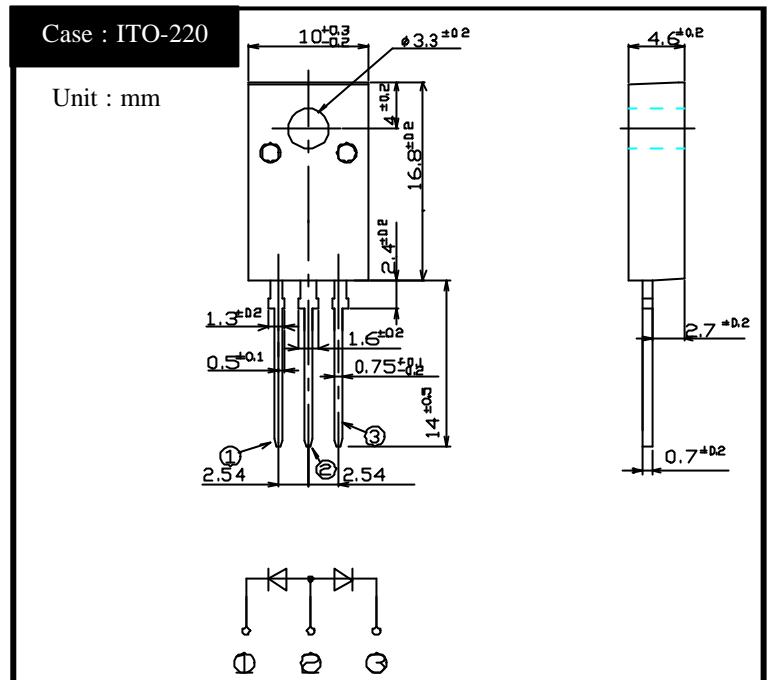
### FEATURES

- Low noise
- trr35ns
- Fully Isolated Molding

### APPLICATION

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

### OUTLINE DIMENSIONS



### RATINGS

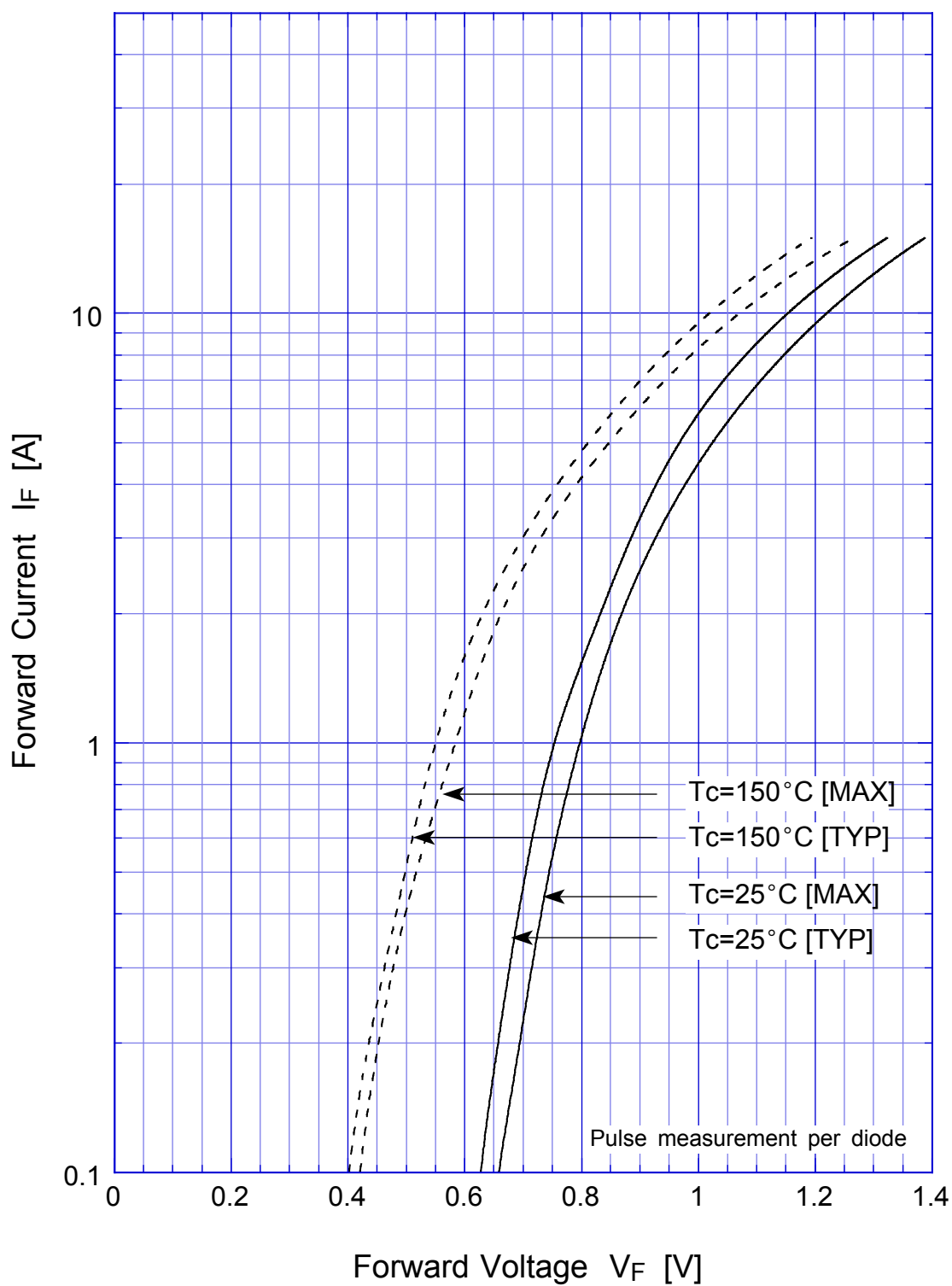
Absolute Maximum Ratings (If not specified Tc=25 )

| Item                              | Symbol           | Conditions  | Ratings   | Unit |
|-----------------------------------|------------------|---|-----------|------|
| Storage Temperature               | Tstg             |   | -40 ~ 150 |      |
| Operating Junction Temperature    | Tj               |   | 150       |      |
| Maximum Reverse Voltage           | V <sub>RM</sub>  |   | 200       | V    |
| Average Rectified Forward Current | I <sub>O</sub>   | 50Hz sine wave, R-load, Rating for each diode I <sub>O</sub> /2, Tc=122 | 8         | A    |
| Peak Surge Forward Current        | I <sub>FSM</sub> | 50Hz sine wave, Non-repetitive 1 cycle peak value, Tj=25                | 60        | A    |
| Dielectric Strength               | V <sub>dis</sub> | Terminals to case, AC 1 minute  | 1.5       | kV   |
| Mounting Torque                   | TOR              | (Recommended torque 0.3N·m)   | 0.5       | N·m  |

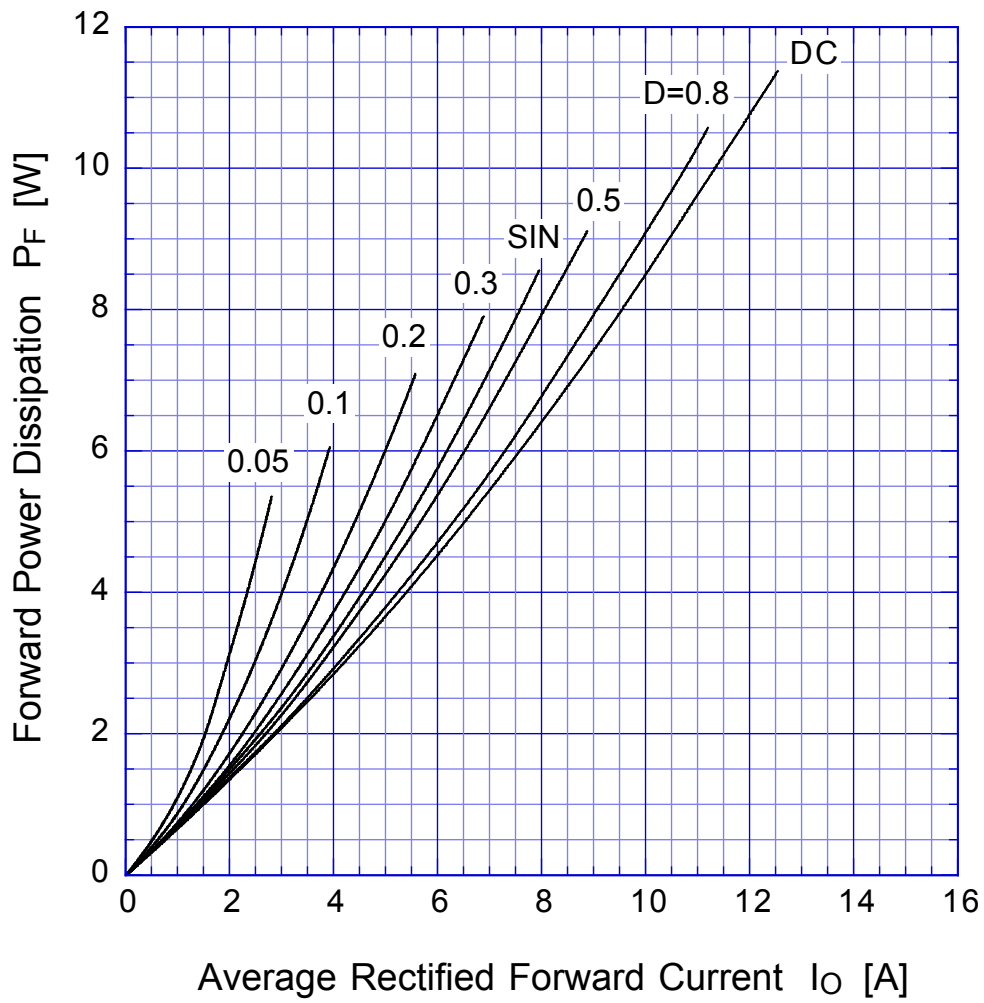
Electrical Characteristics (If not specified Tc=25 )

| Item                  | Symbol         | Conditions   | Ratings  | Unit |
|-----------------------|----------------|--|----------|------|
| Forward Voltage       | V <sub>F</sub> | I <sub>F</sub> =4A, Pulse measurement, Rating of per diode               | Max.0.98 | V    |
| Reverse Current       | I <sub>R</sub> | V <sub>R</sub> =V <sub>RM</sub> , Pulse measurement, Rating of per diode | Max.10   | μA   |
| Reverse Recovery Time | trr            | I <sub>F</sub> =0.5A, I <sub>R</sub> =1A, Rating of per diode            | Max.35   | ns   |
| Thermal Resistance    | jc             | junction to case   | Max.3.3  | /W   |

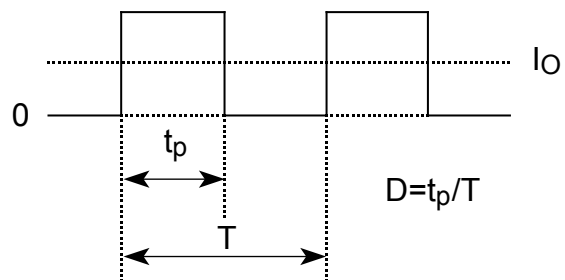
# D8LC20UR Forward Voltage



## D8LC20UR Forward Power Dissipation

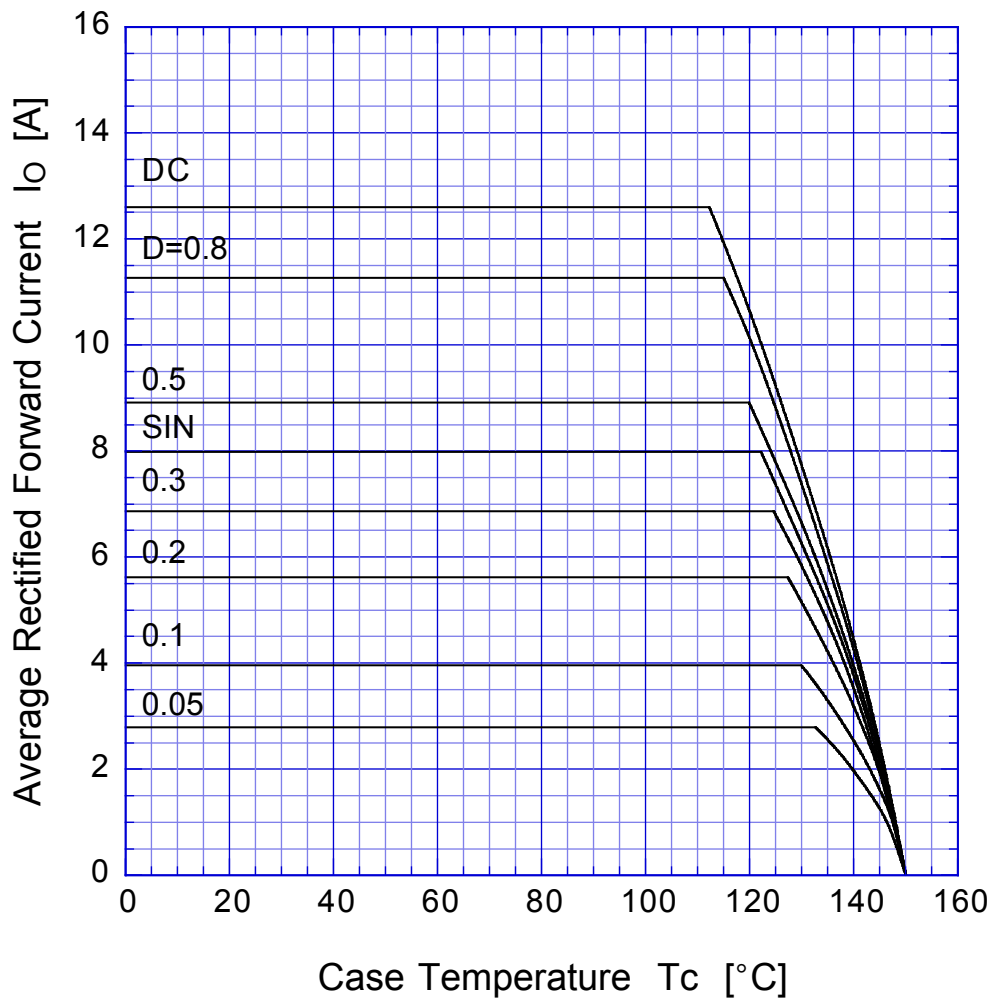


$T_j = T_{jmax}$



# D8LC20UR

## Derating Curve

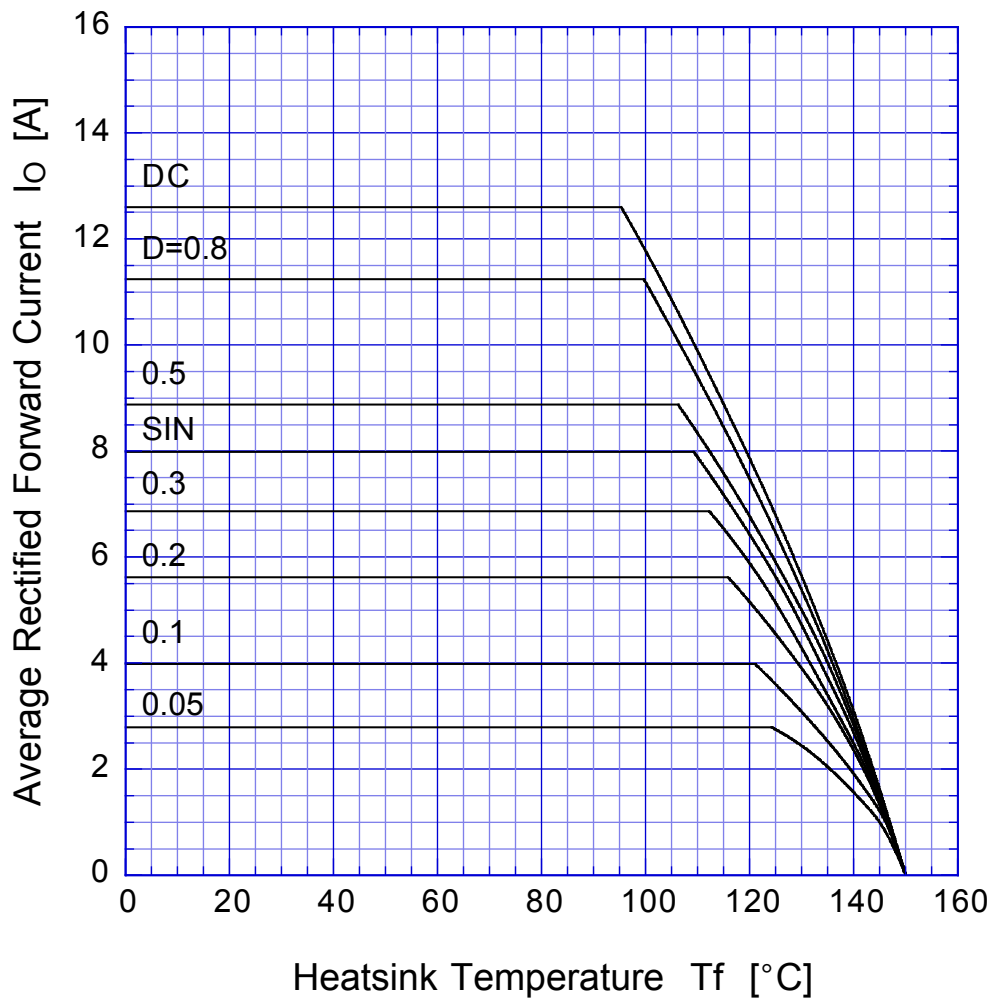


$$V_R = V_{RM}$$

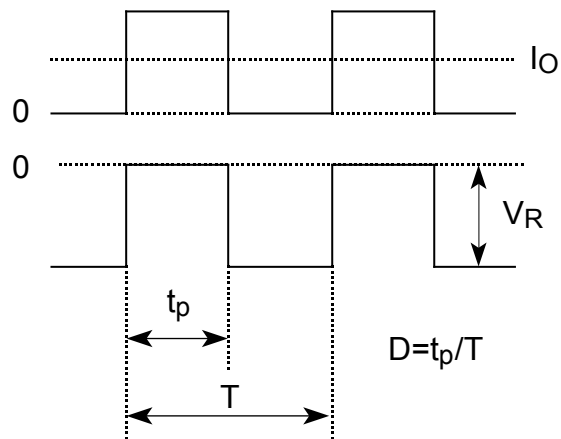


# D8LC20UR

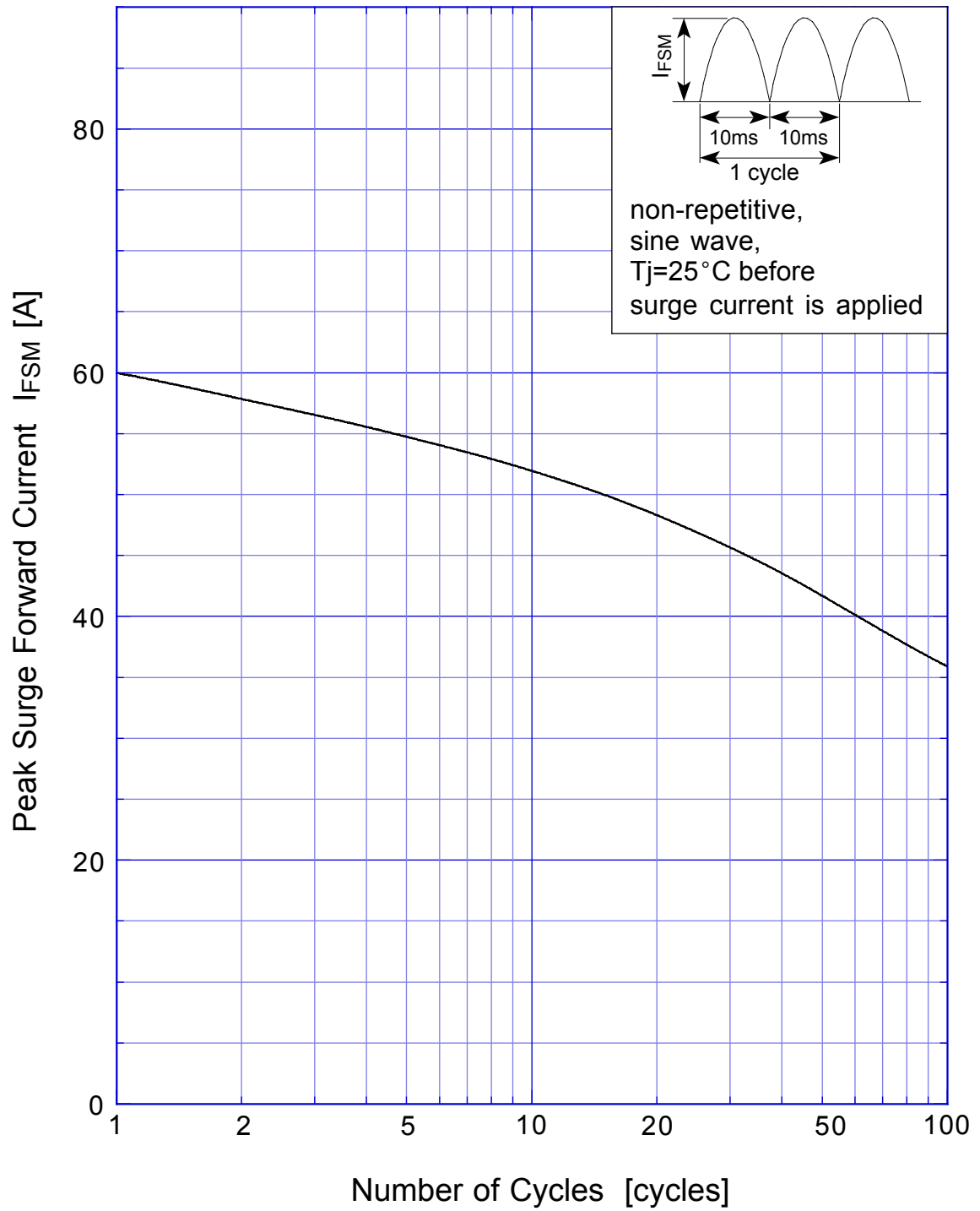
## Derating Curve



$$V_R = V_{RM}$$



## D8LC20UR Peak Surge Forward Capability



# D8LC20UR Junction Capacitance

