

# SHINDENGEN

## Super Fast Recovery Rectifiers

Dual

# D5LC20U

## 200V 5A

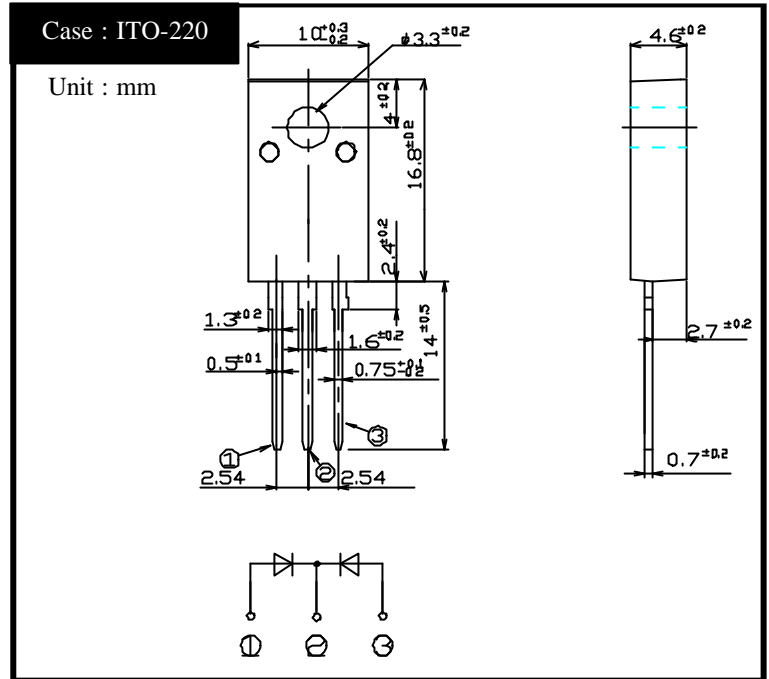
### FEATURES

- 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 )

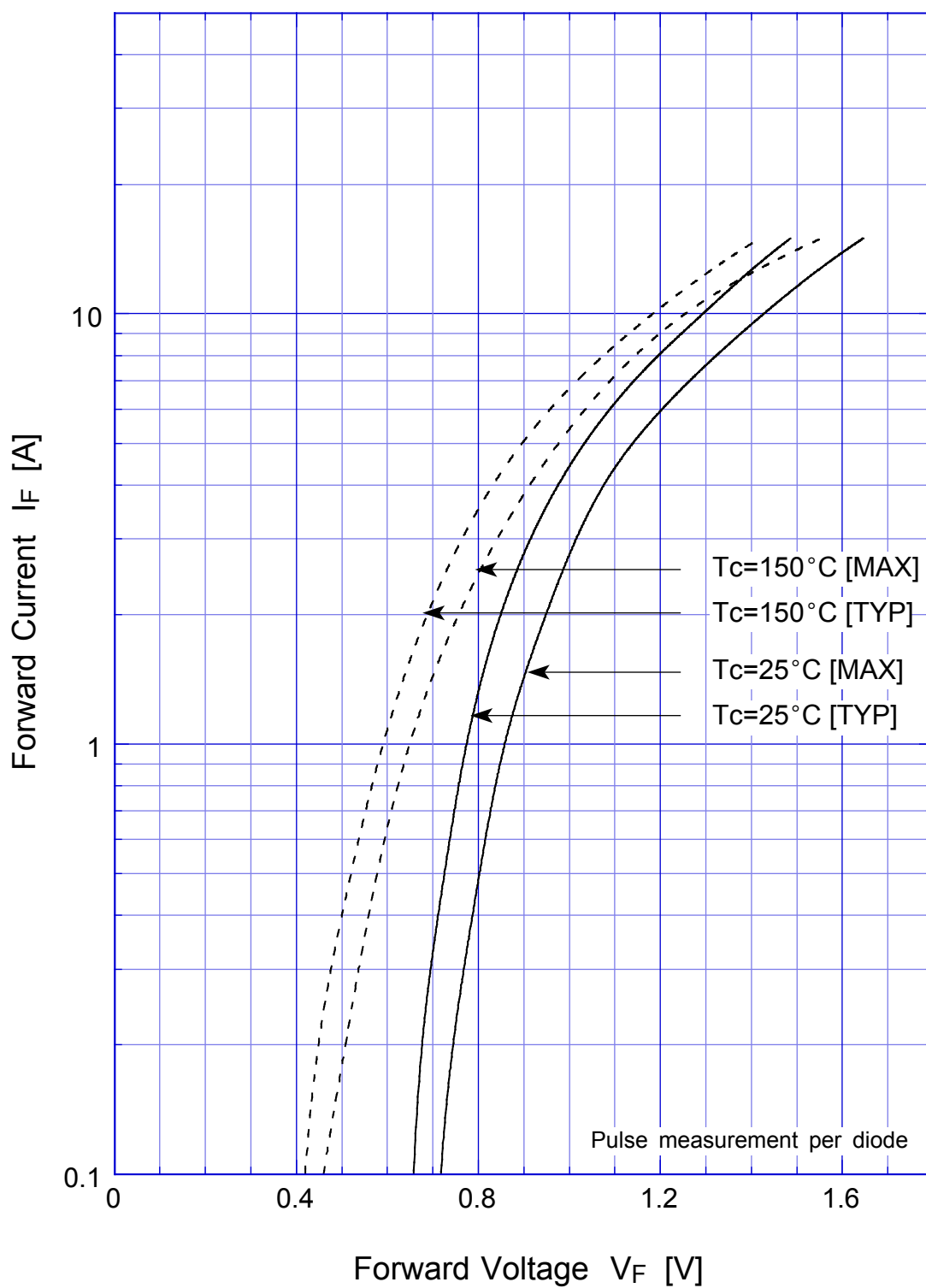
| Item                              | Symbol           | Conditions  | Ratings   | Unit |
|-----------------------------------|------------------|---|-----------|------|
| Storage Temperature               | Tstg             |   | -40 ~ 150 |      |
| Operating Junction Temperature    | Tj               |   | 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=132 | 5         | A    |
| Peak Surge Forward Current        | I <sub>FSM</sub> | 50Hz sine wave, Non-repetitive 1 cycle peak value, Tj=25                | 45        | 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 )

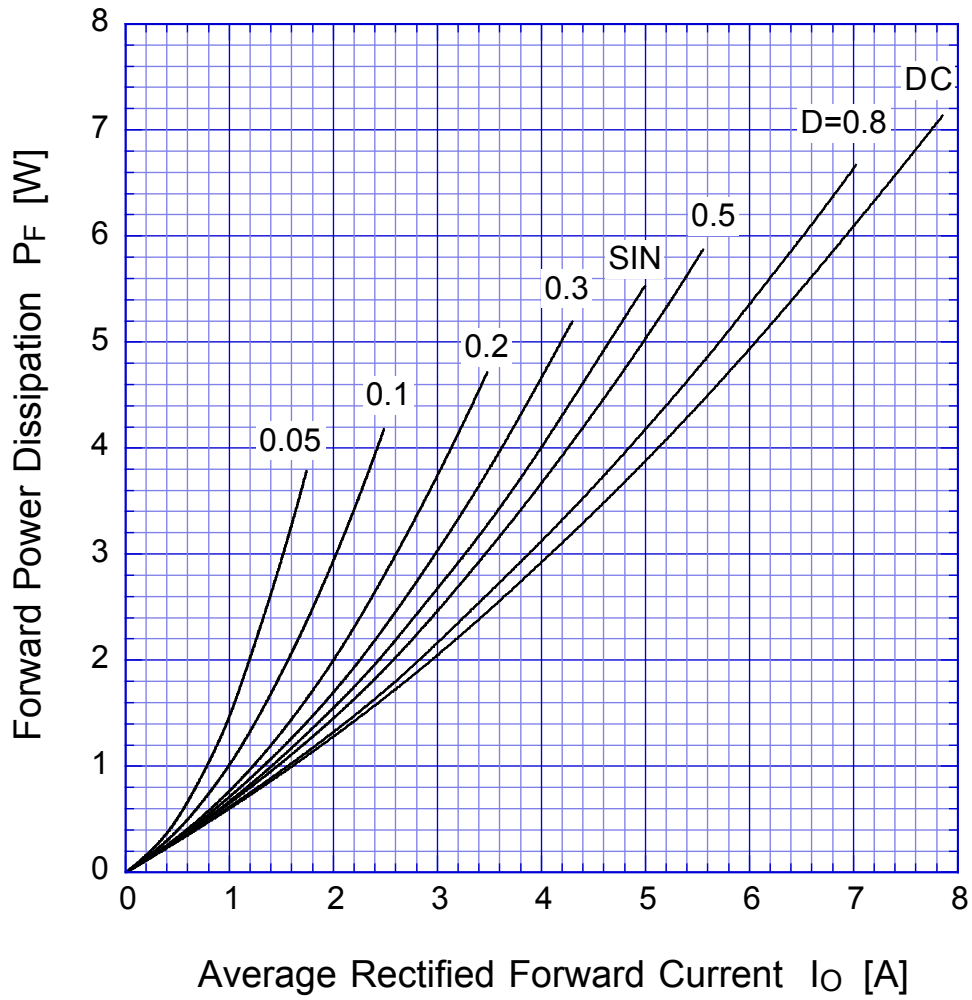
| Item                  | Symbol          | Conditions   | Ratings  | Unit |
|-----------------------|-----------------|--|----------|------|
| Forward Voltage       | V <sub>F</sub>  | I <sub>F</sub> =2.5A, Pulse measurement, Rating of per diode             | Max.0.98 | V    |
| Reverse Current       | 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    | θ <sub>JC</sub> | junction to case   | Max.3.3  | /W   |

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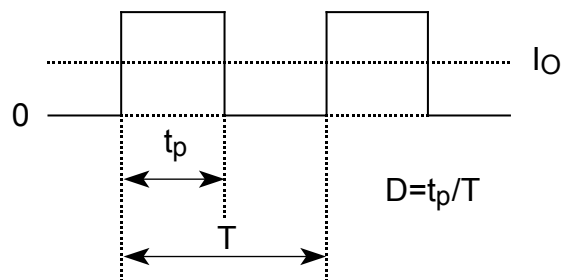
## Forward Voltage



# D5LC20U Forward Power Dissipation

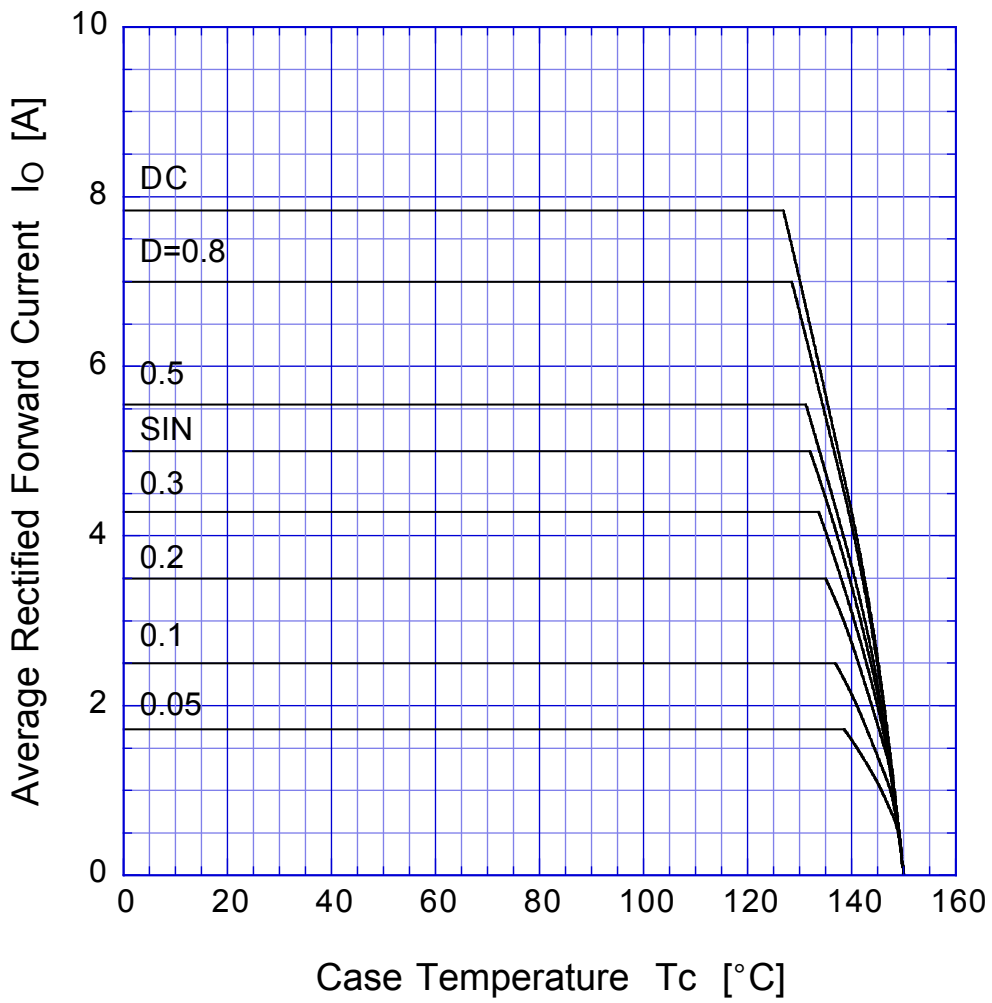


$T_j = 150^\circ\text{C}$



# D5LC20U

# Derating Curve

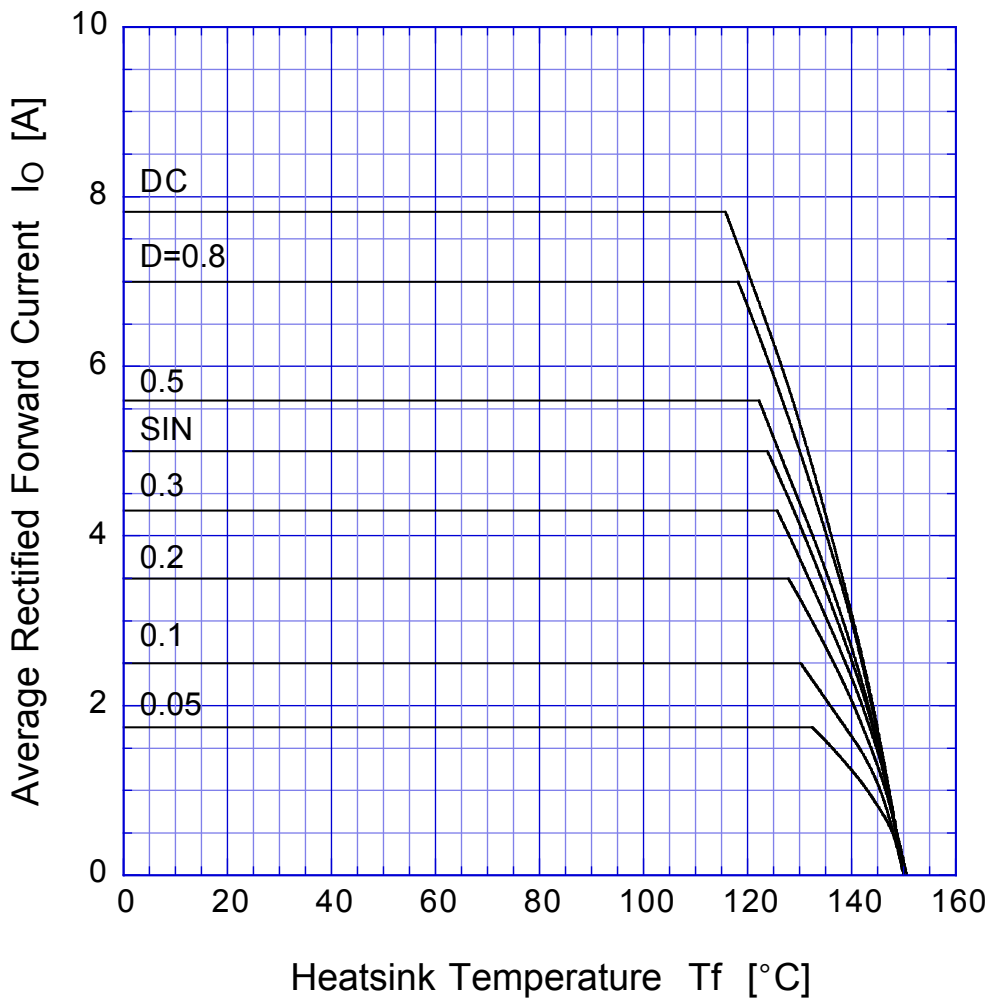


$$V_R = V_{RM}$$

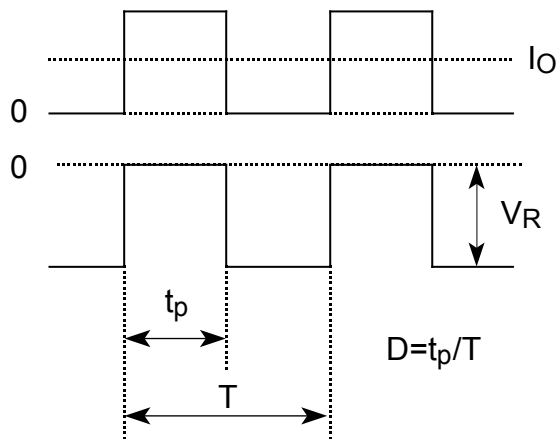


# D5LC20U

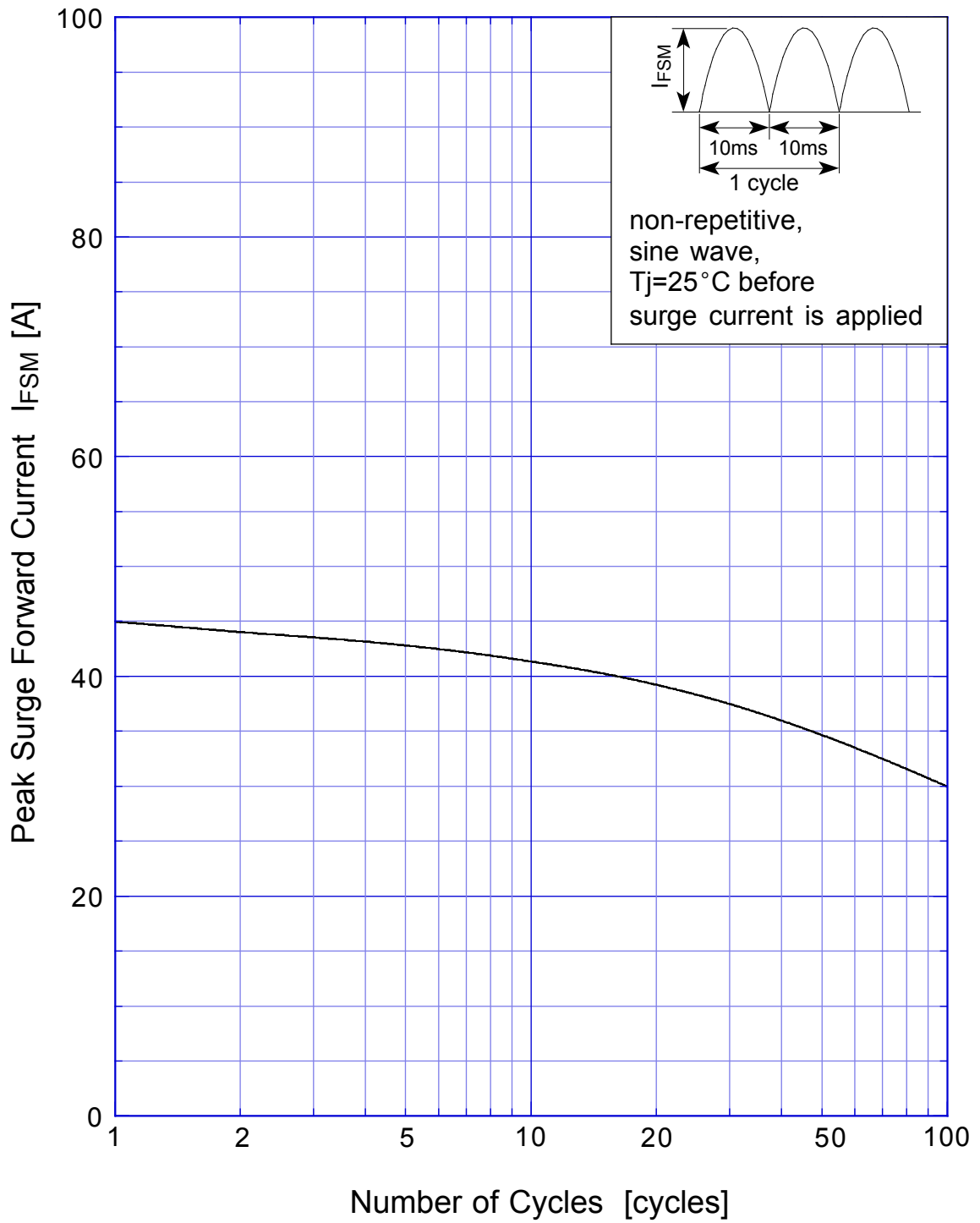
# Derating Curve



$$V_R = V_{RM}$$



# D5LC20U Peak Surge Forward Capability



# D5LC20U Junction Capacitance

