

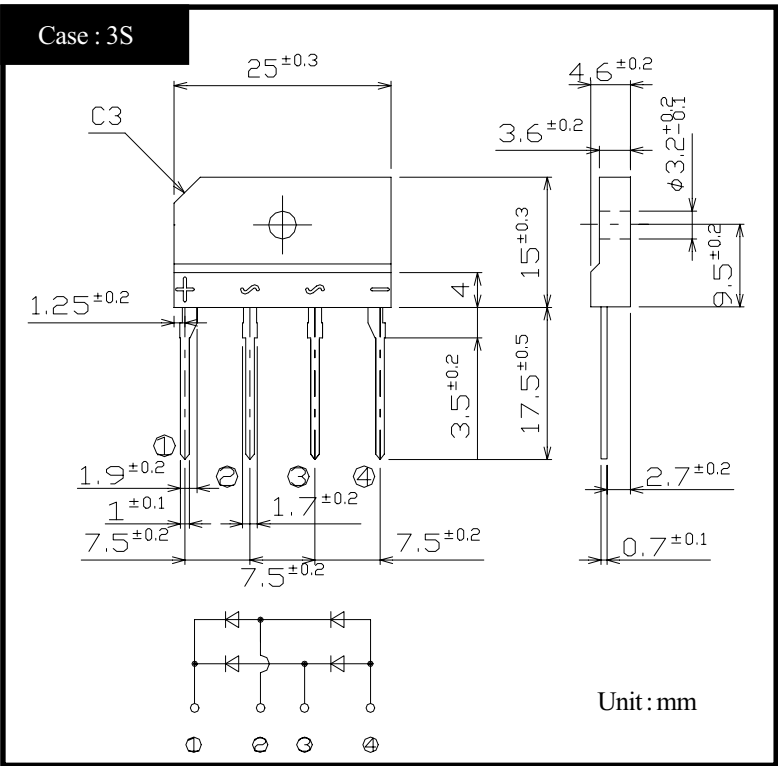
D15XBS6

60V 15A

FEATURES

- Thin Single In-Line Package
- SBD Bridge
- Low VF

OUTLINE DIMENSIONS



RATINGS

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

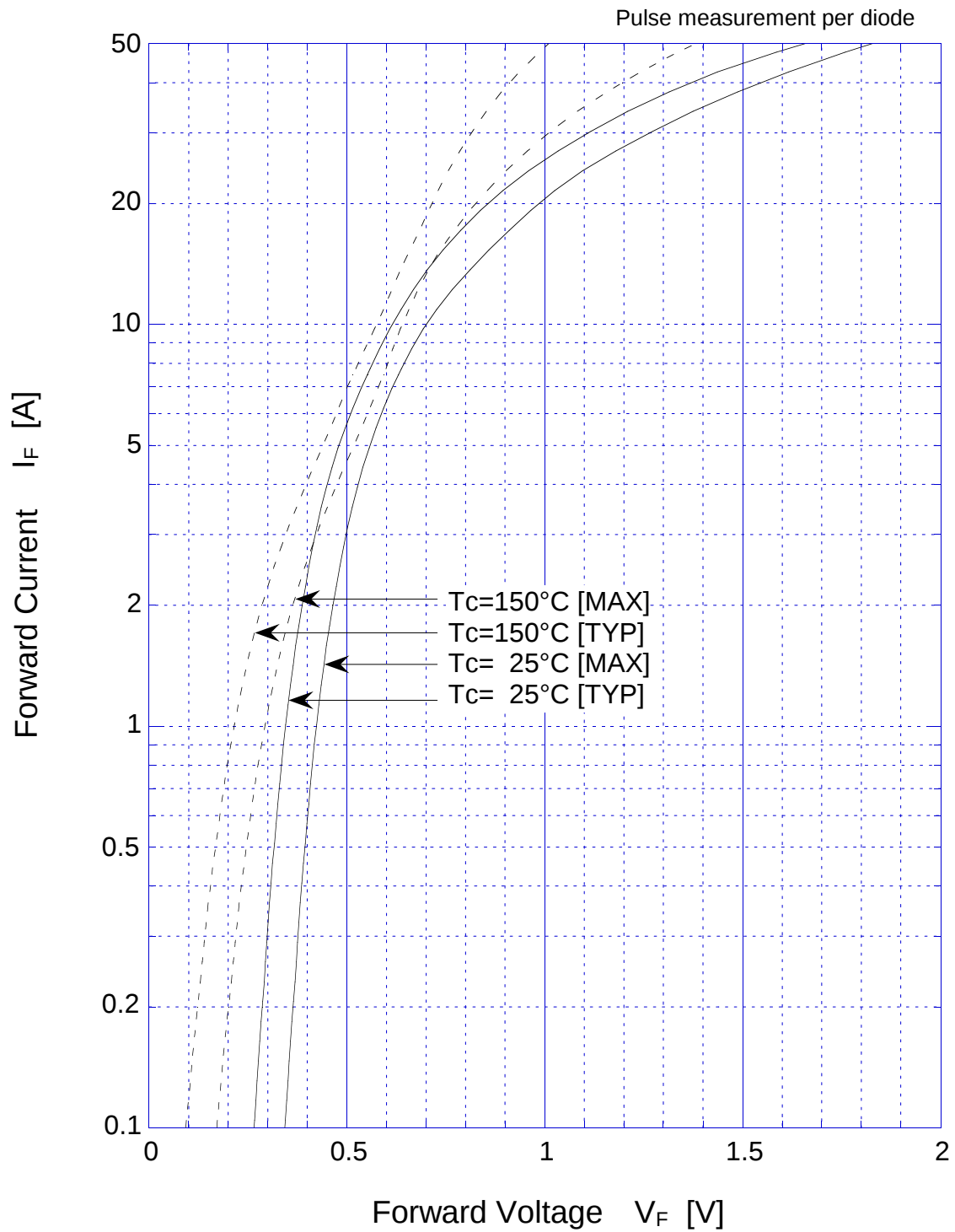
| Item                                  | Symbol            | Conditions                                                | Ratings | Unit |
|---------------------------------------|-------------------|-----------------------------------------------------------|---------|------|
| Storage Temperature                   | Tstg              |                                                           | -55~150 | °C   |
| Operating Junction Temperature        | Tj                |                                                           | 150     | °C   |
| Maximum Reverse Voltage               | V <sub>RM</sub>   |                                                           | 60      | V    |
| Repetitive Peak Surge Reverse Voltage | V <sub>RRSM</sub> | Pulse width 0.5ms, duty 1/40                              | 65      | V    |
| Average Rectified Forward Current     | I <sub>O</sub>    | 50Hz sine wave, R-load With heatsink Tc=59°C              | 15      | A    |
|                                       |                   | 50Hz sine wave, R-load Without heatsink Ta=25°C           | 2.1     |      |
| Peak Surge Forward Current            | I <sub>FSM</sub>  | 50Hz sine wave, Non-repetitive 1cycle peak value, Tj=25°C | 150     | A    |
| Repetitive Peak Surge Reverse Power   | P <sub>RRSM</sub> | Pulse width 10is, Rating of per diode, Tj=25°C            | 330     | W    |
| Dielectric Strength                   | Vdis              | Terminals to case, AC 1 minute                            | 2       | kV   |
| Mounting Torque                       | TOR               | ( Recommended torque: 0.5N·m)                             | 0.8     | N·m  |

●Electrical Characteristics (If not specified Tc=25°C)

| Item                 | Symbol          | Conditions                                                  | Ratings  | Unit |
|----------------------|-----------------|-------------------------------------------------------------|----------|------|
| Forward Voltage      | V <sub>F</sub>  | IF=7.5A, Pulse measurement, Rating of per diode             | Max.0.63 | V    |
| Reverse Current      | I <sub>R</sub>  | V <sub>R</sub> =60V, Pulse measurement, Rating of per diode | Max.6    | mA   |
| Junction Capacitance | Cj              | f=1MHz, V <sub>R</sub> =10V, Rating of per arm              | TYP 410  | pF   |
| Thermal Resistance   | θ <sub>jc</sub> | junction to case With heatsink                              | Max.3.5  | °C/W |
|                      | θ <sub>jl</sub> | junction to lead                                            | Max.6    |      |
|                      | θ <sub>ja</sub> | junction to ambient                                         | Max.30   |      |

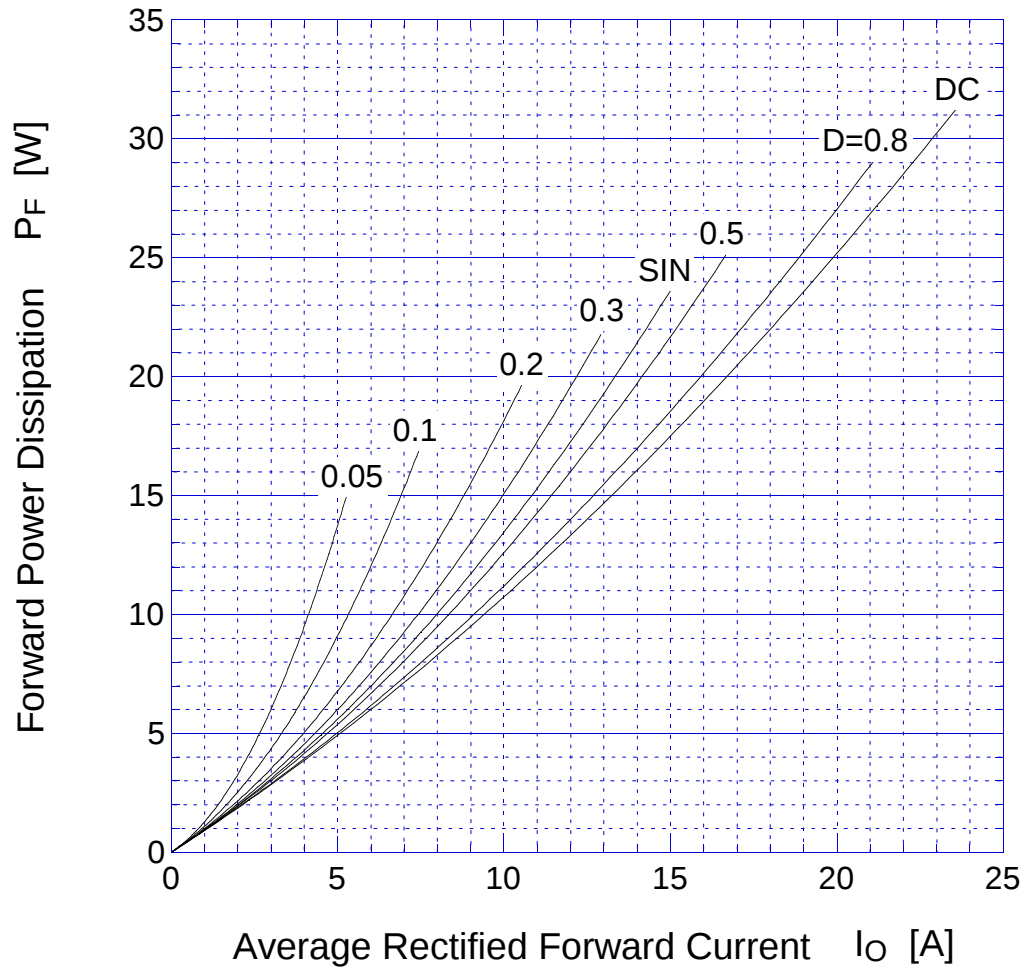
# D15XBS6

## Forward Voltage

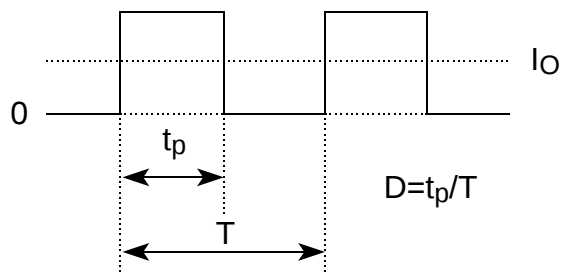


## D15XBS6

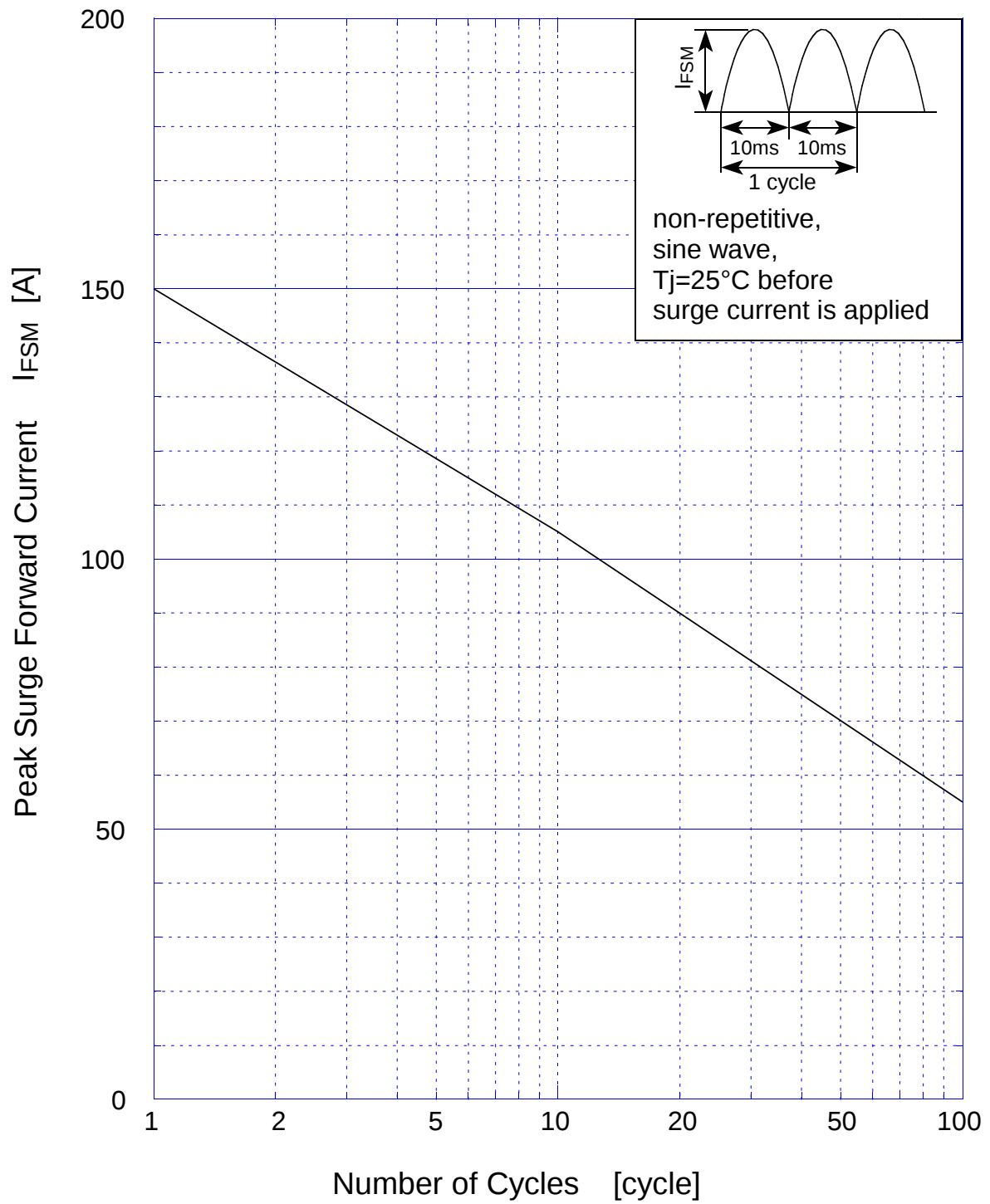
## Forward Power Dissipation



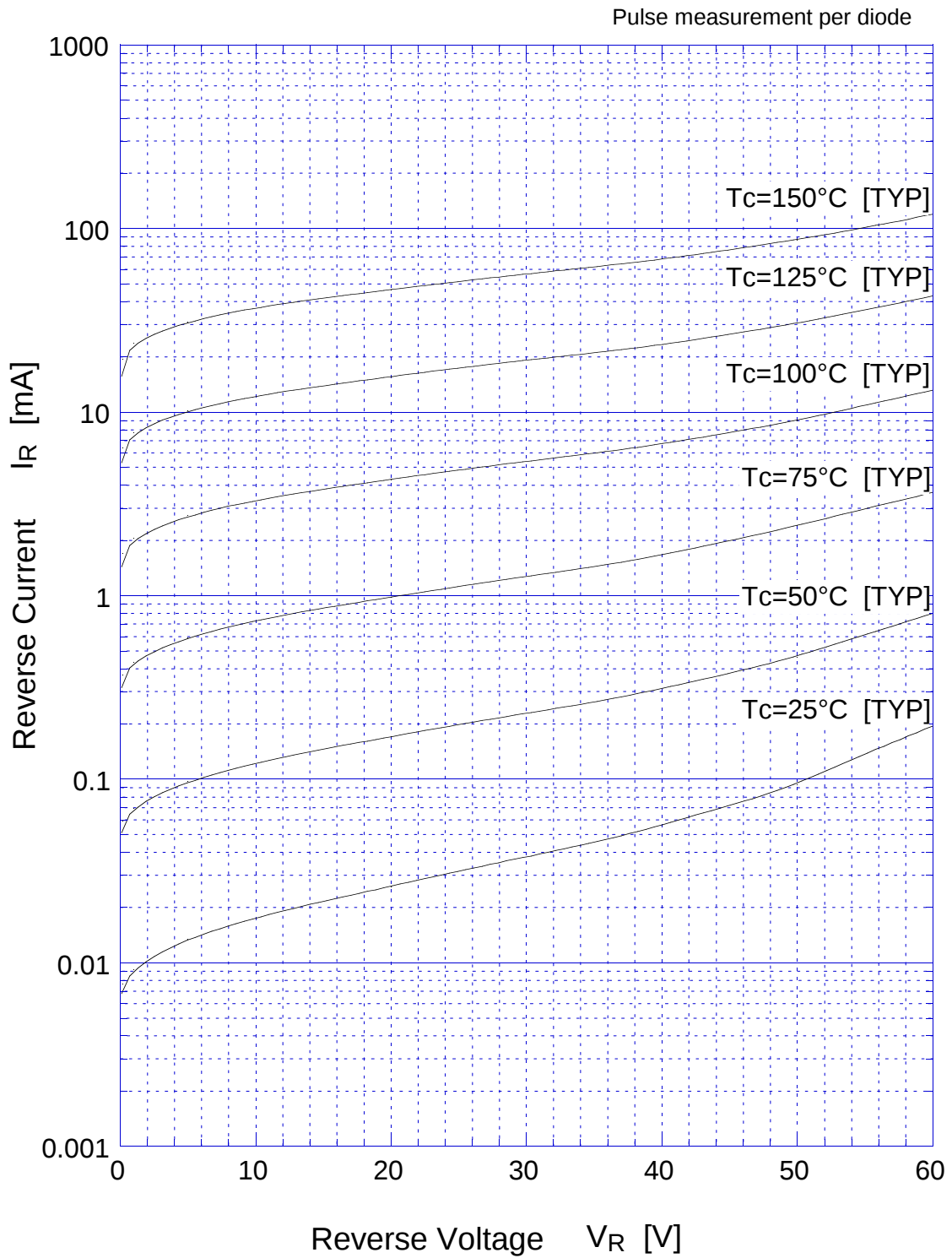
$T_j = 150^\circ\text{C}$



## D15XBS6 Peak Surge Forward Capability

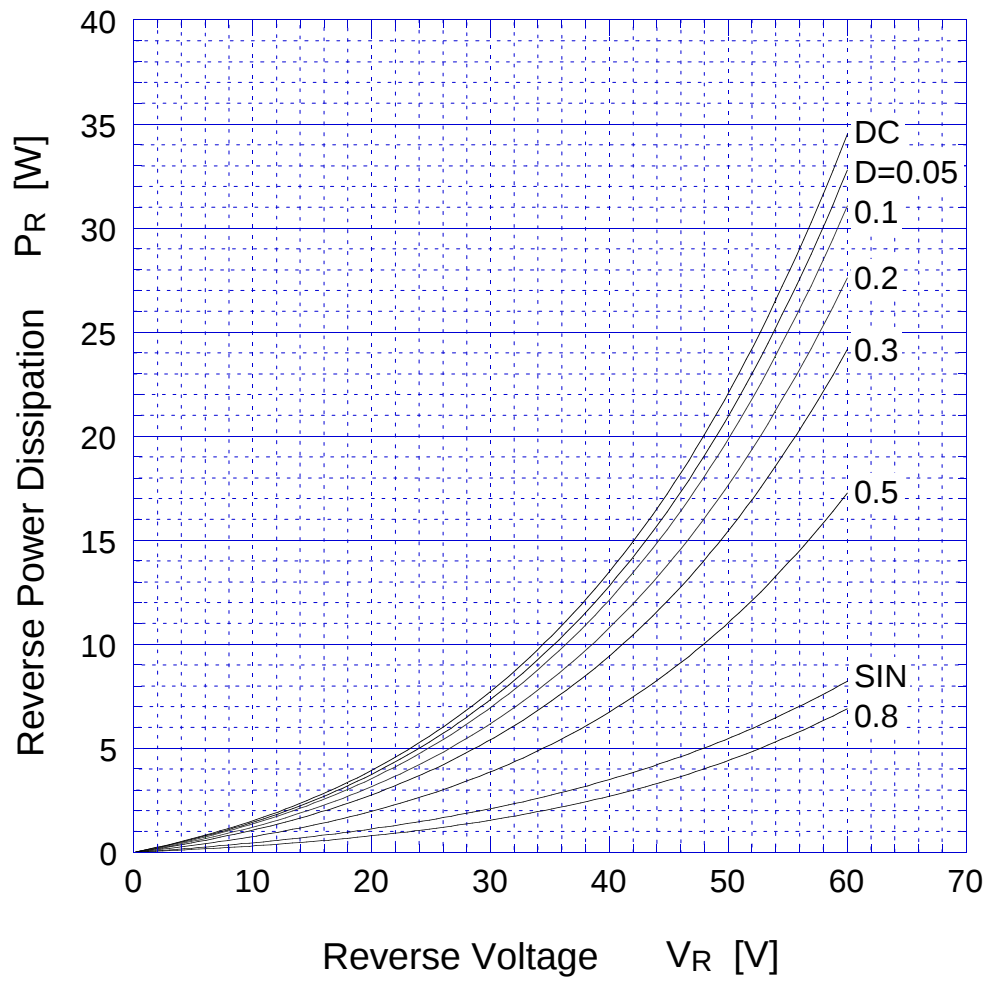


## D15XBS6 Reverse Current

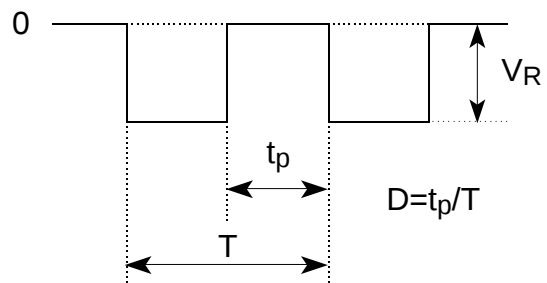


## D15XBS6

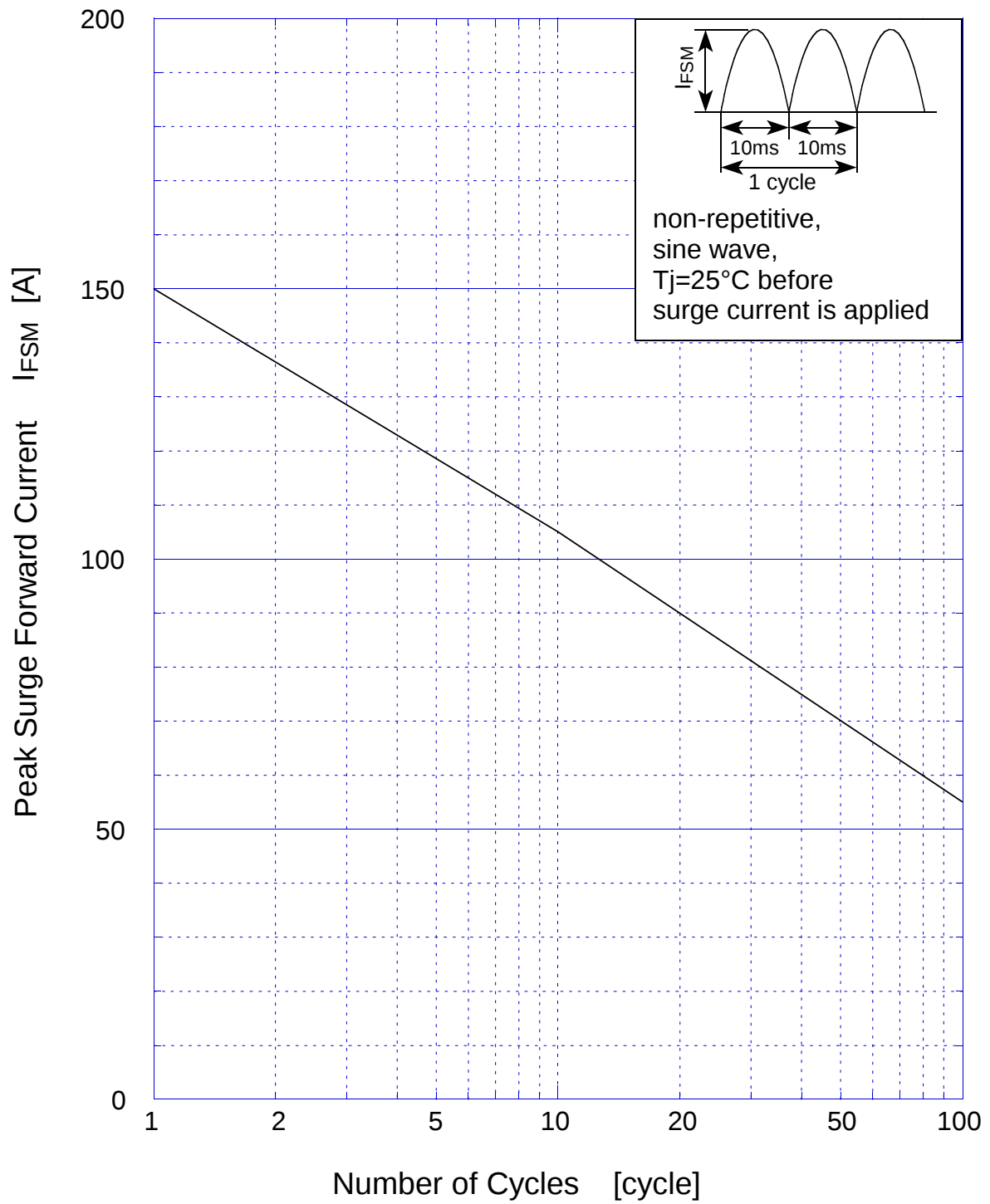
## Reverse Power Dissipation



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

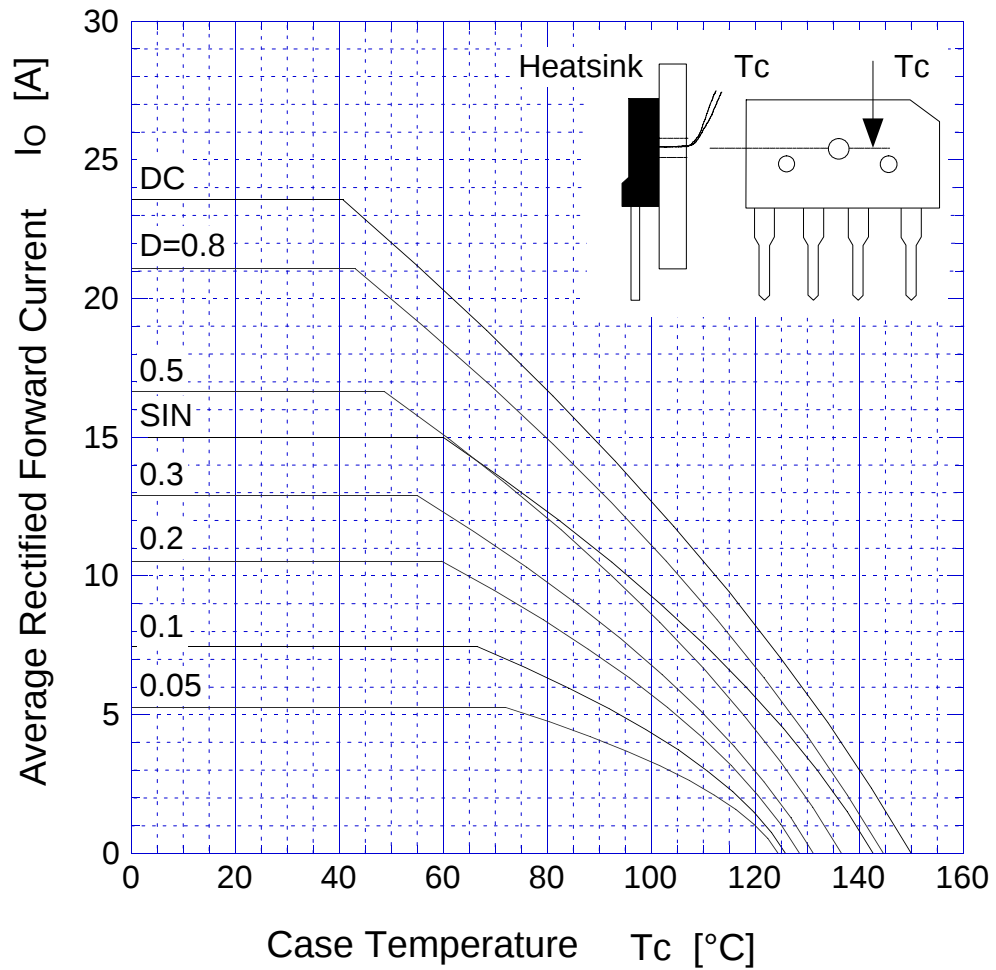


## D15XBS6 Peak Surge Forward Capability

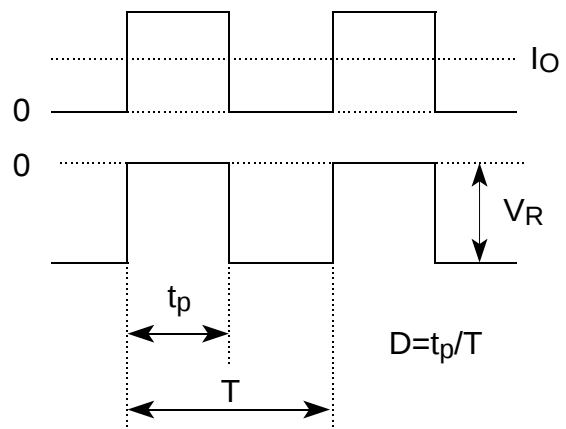


# D15XBS6

## Derating Curve

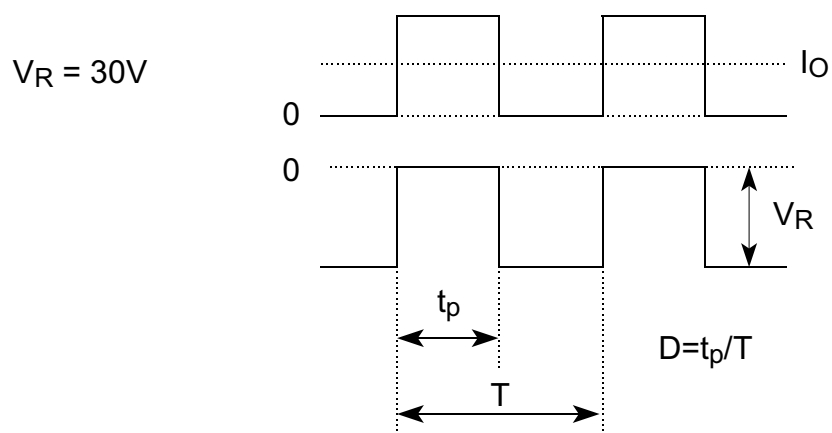
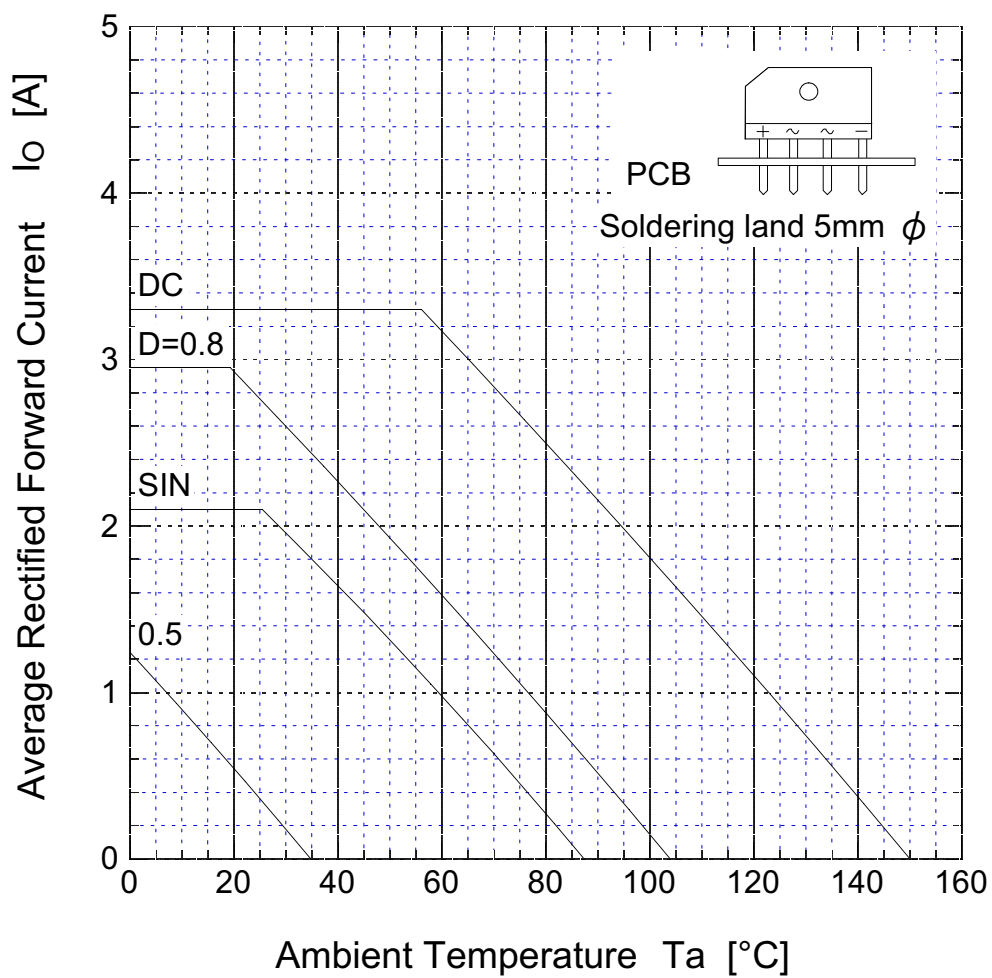


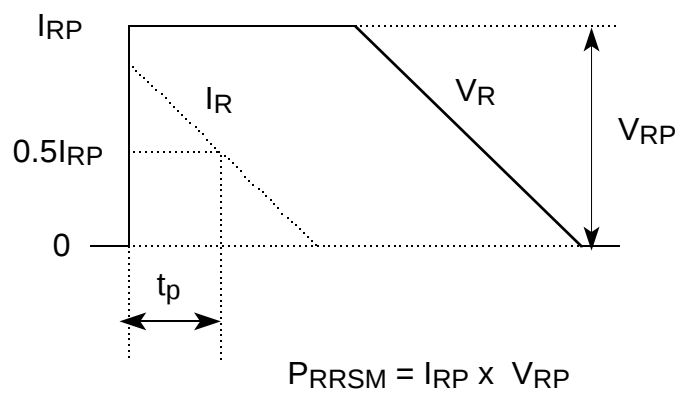
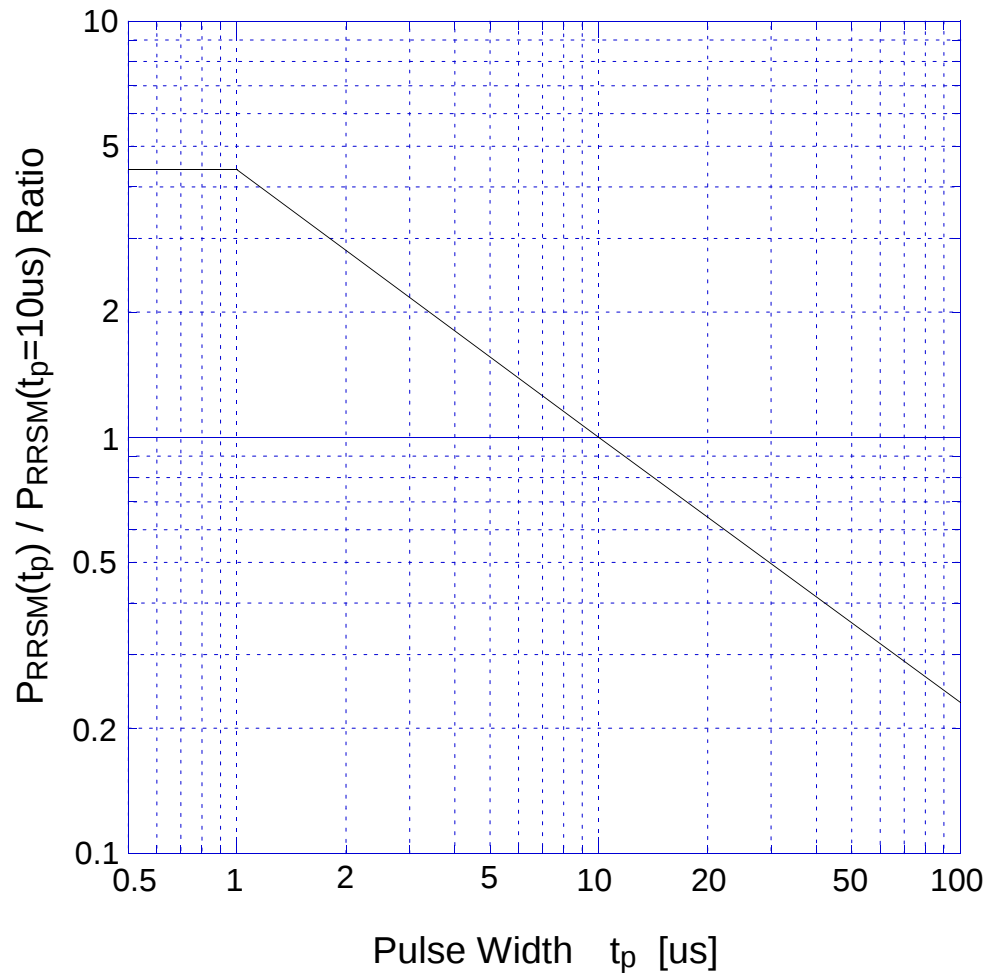
$V_R = 30V$



# D15XBS6

## Derating Curve





## D15XBS6 Repetitive Surge Reverse Power Derating Curve

