

SHINDENGEN

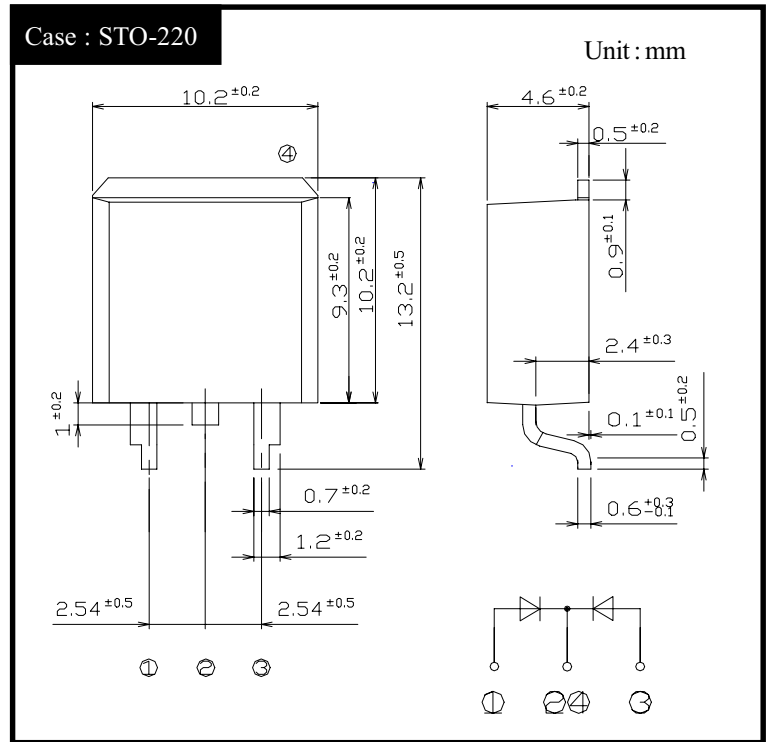
Shottky Rectifiers (SBD)

Dual

DF30JC6

60V 30A

OUTLINE DIMENSIONS



RATINGS

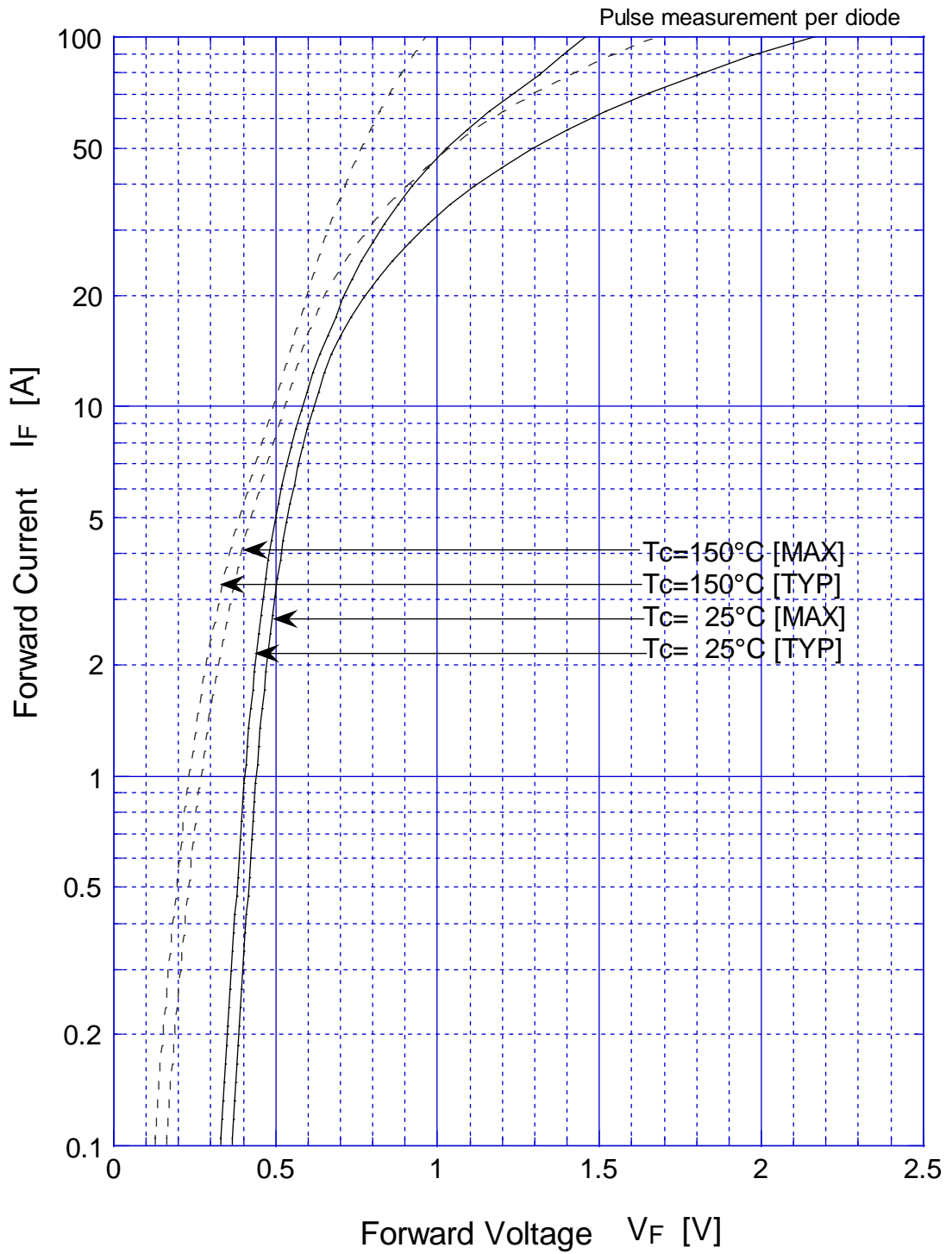
● Absolute Maximum Ratings (Unless otherwise specified, $T_c=25^\circ\text{C}$)

| 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} | | 60 | V |
| Repetitive Peak Surge Reverse Voltage | V_{RRSM} | Pulse width 0.5ms, duty 1/40 | 65 | V |
| Average Rectified Forward Current | I_O | 50Hz sine wave, R-load, Rating for each diode $I_O/2$, $T_c=108^\circ\text{C}$ | 30 | A |
| Peak Surge Forward Current | I_{FSM} | 50Hz sine wave, Non-repetitive 1 cycle peak value, $T_j=25^\circ\text{C}$ | 250 | A |

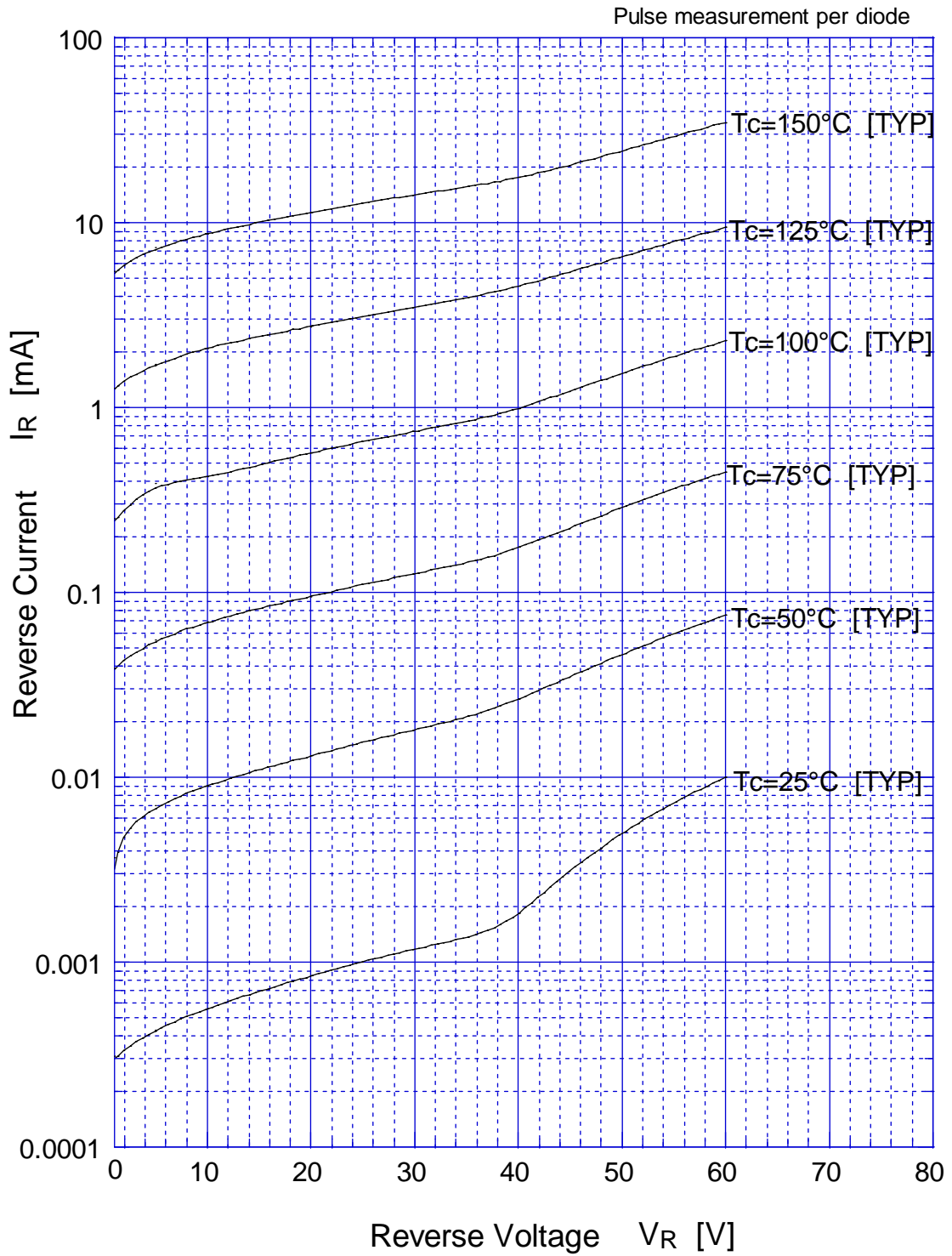
● Electrical Characteristics (Unless otherwise specified, $T_c=25^\circ\text{C}$)

| Item | Symbol | Conditions | Ratings | Unit |
|----------------------|---------------|---|----------|--------------------|
| Forward Voltage | V_F | $I_F=15\text{A}$, Pulse measurement, Rating of per diode | Max 0.69 | V |
| Reverse Current | I_R | $V_R=V_{RM}$, Pulse measurement, Rating of per diode | Max 0.7 | mA |
| Junction Capacitance | C_j | $f=1\text{MHz}$, $V_R=10\text{V}$, Rating of per diode | Typ 490 | pF |
| Thermal Resistance | θ_{jc} | junction to case | Max 1.6 | $^\circ\text{C/W}$ |

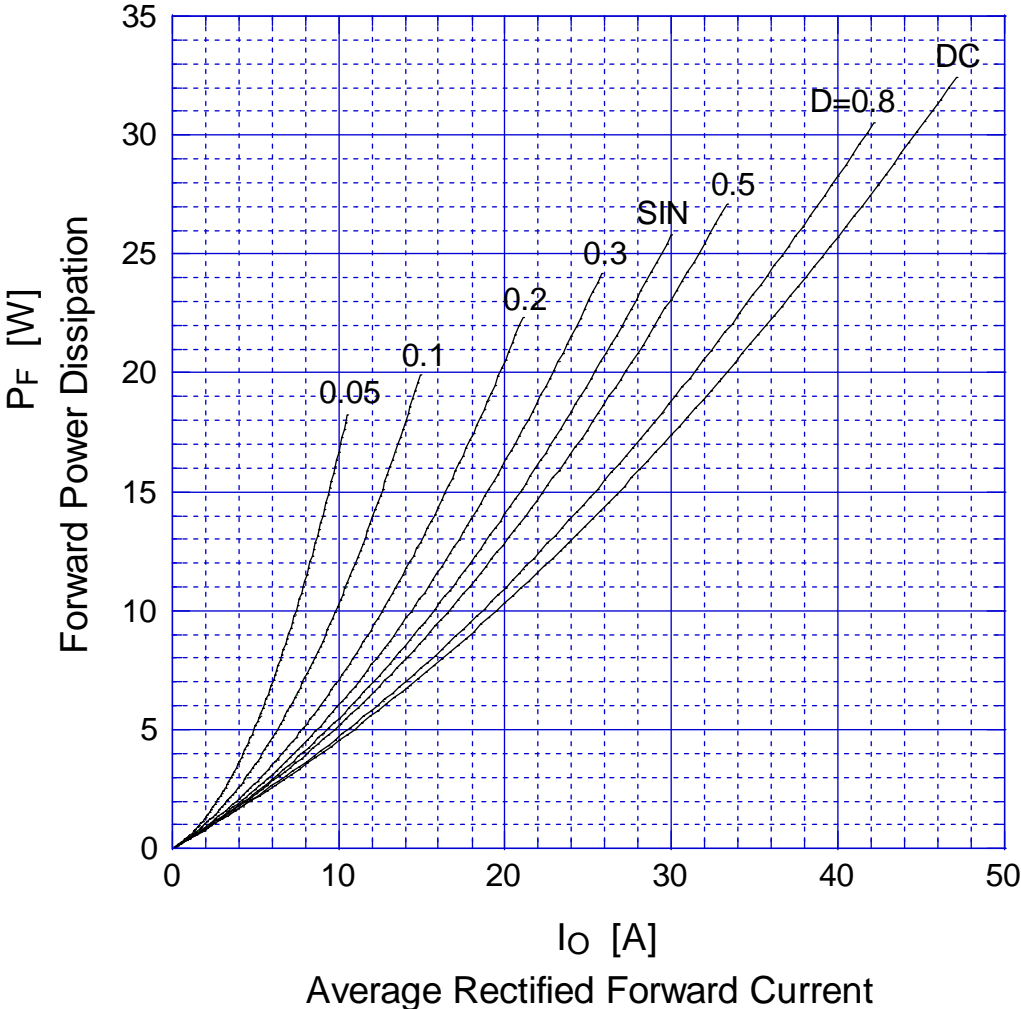
DF30JC6 Forward Voltage



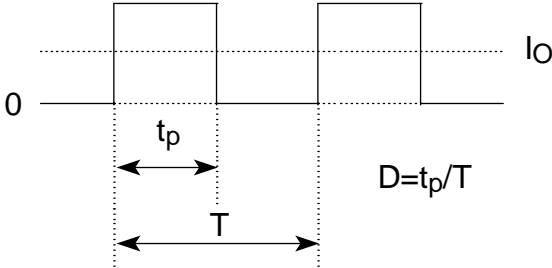
DF30JC6 Reverse Current



DF30JC6 Forward Power Dissipation

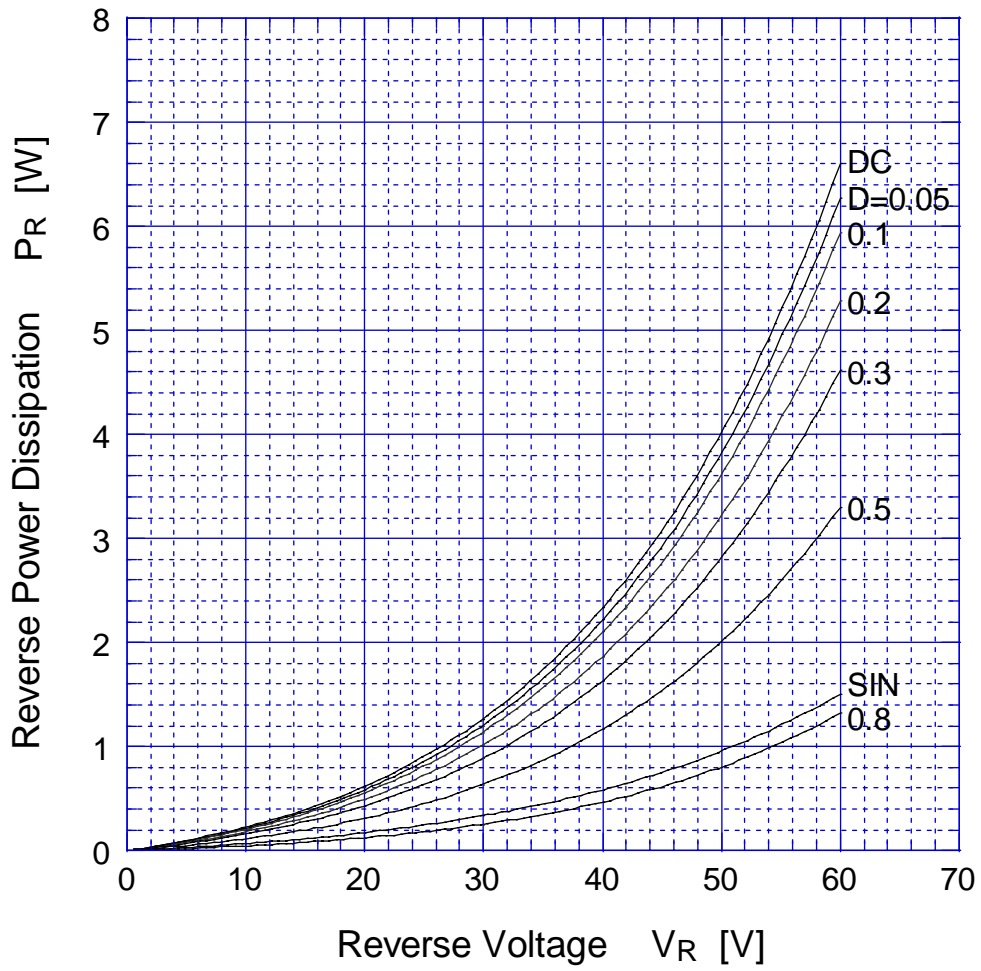


Tj = 150°C

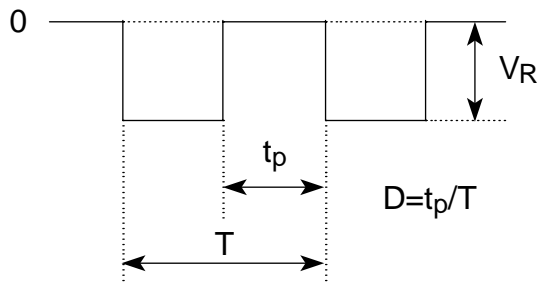


DF30JC6

Reverse Power Dissipation

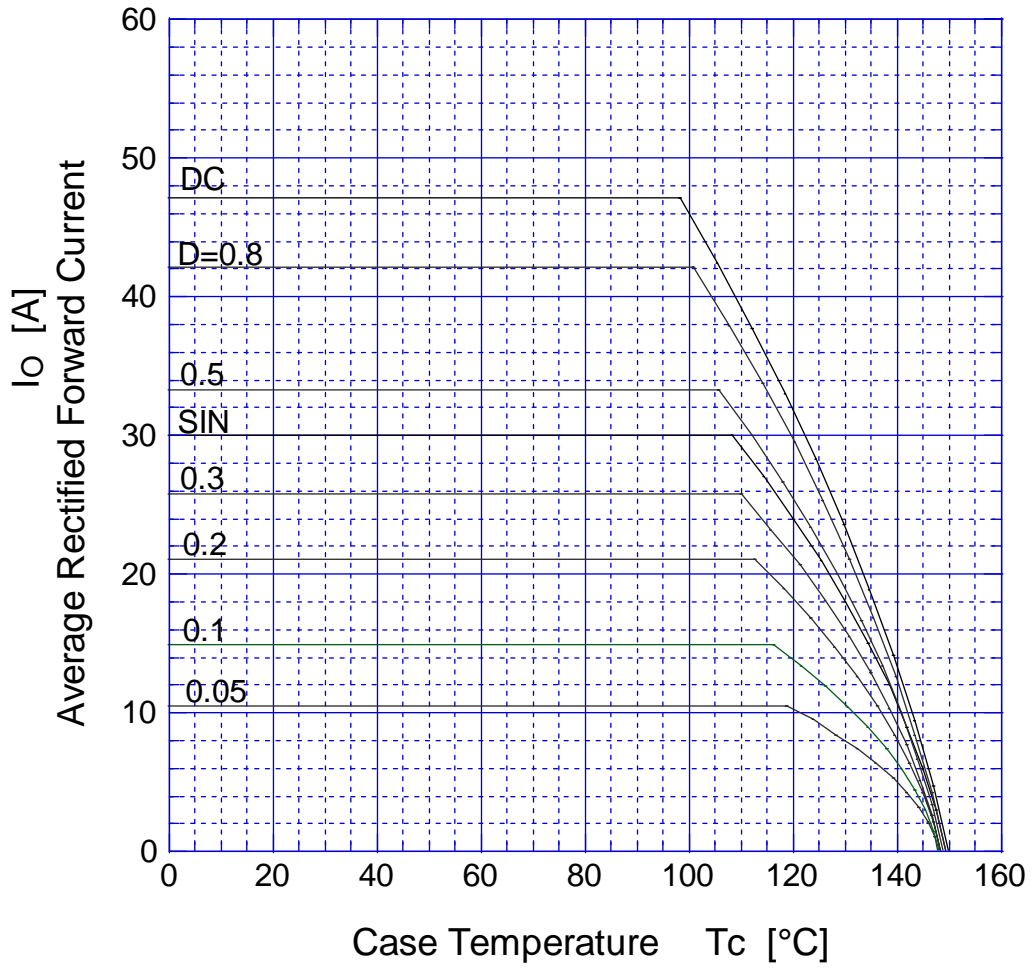


$T_j = 150^\circ\text{C}$

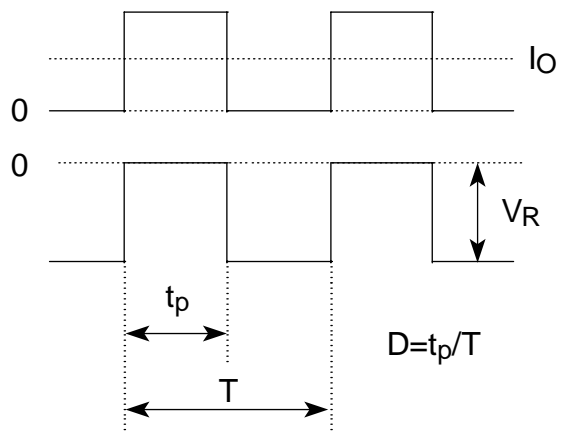


DF30JC6

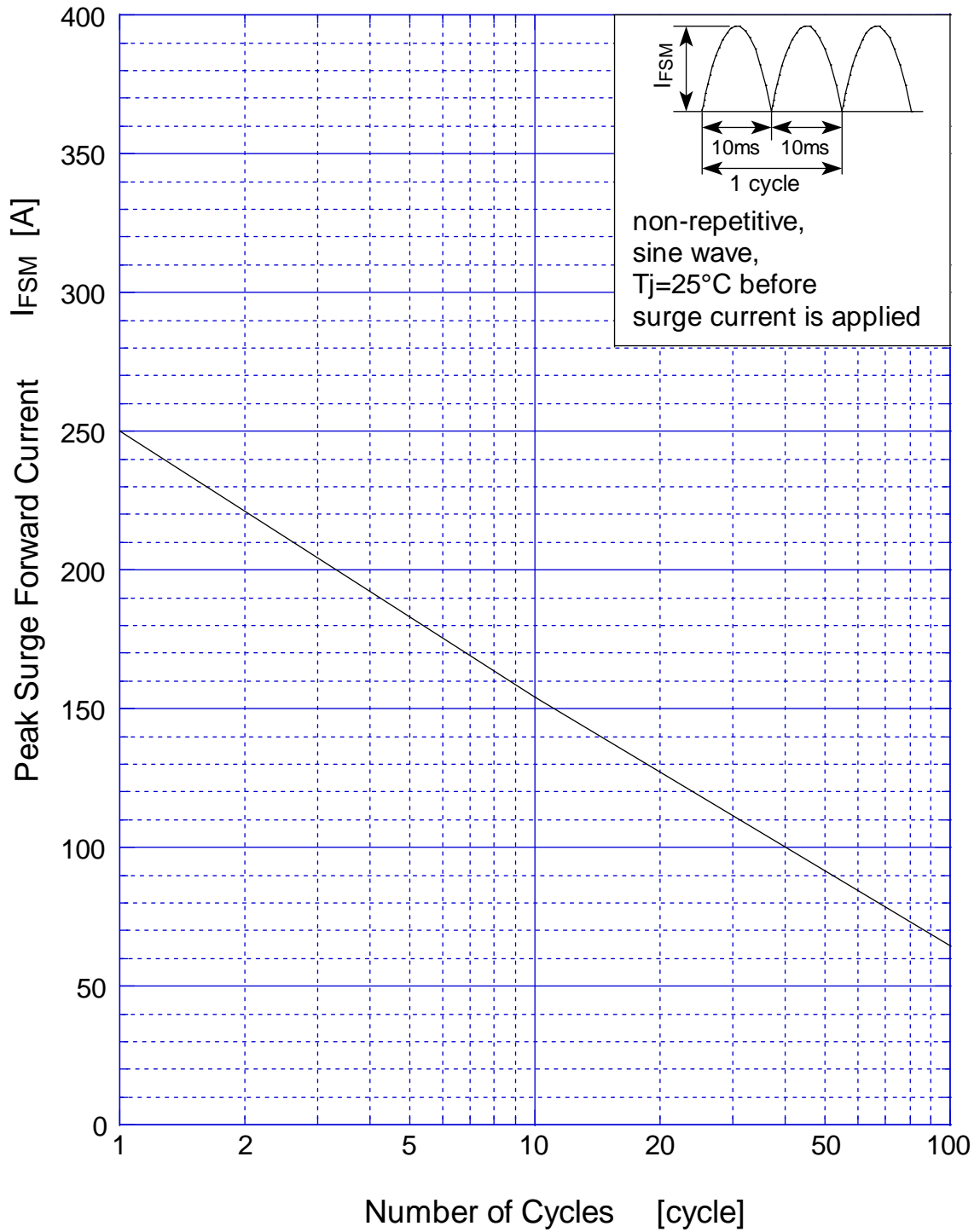
Derating Curve



$V_R = 30V$



DF30JC6 Peak Surge Forward Capability



DF30JC6 Junction Capacitance

