

# SHINDENGEN

## Super Fast Recovery Rectifiers

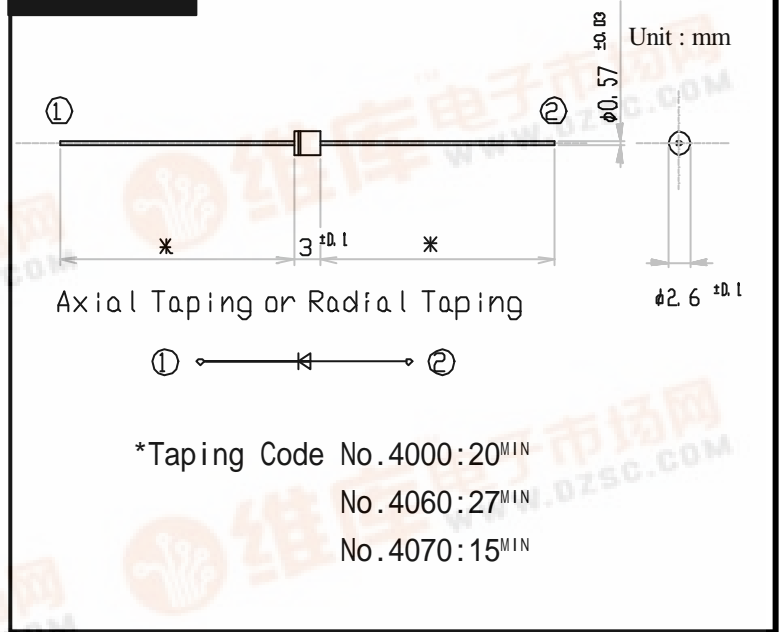
Single

# D1NF60

## 600V 0.8A

### OUTLINE DIMENSIONS

Case : AX-057



### RATINGS

Absolute Maximum Ratings (If not specified Tl=25 )

| Item                              | Symbol           | Conditions   | Ratings   | Unit |
|-----------------------------------|------------------|--|-----------|------|
| Storage Temperature               | Tstg             |  | -55 ~ 150 |      |
| Operating Junction Temperature    | Tj               |  | 150       |      |
| Peak Reverse Voltage              | V <sub>RM</sub>  |  | 600       | V    |
| Average Rectified Forward Current | I <sub>o</sub>   | 50Hz sine wave, resistance load, Ta=25                   | 0.8       | A    |
| Peak Surge Forward Current        | I <sub>FSM</sub> | Sine wave 50Hz, Non-repetitive 1 cycle peak value, Tj=25 | 50        | A    |

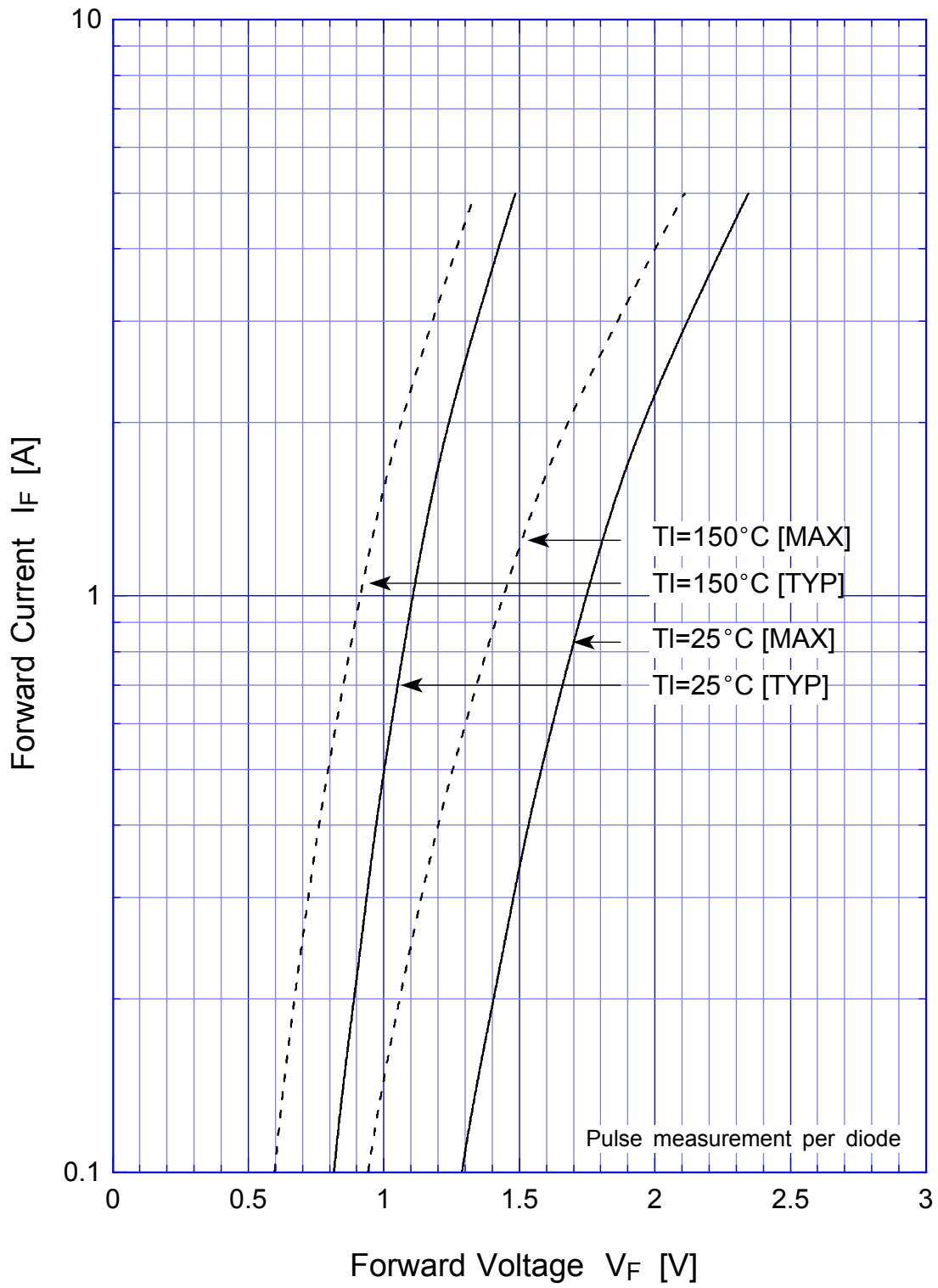
Electrical Characteristics (If not specified Tl=25 )

| Item                  | Symbol          | Conditions                               | Ratings | Unit |
|-----------------------|-----------------|--|---------|------|
| Forward Voltage       | V <sub>F</sub>  | I <sub>F</sub> =0.8A, Pulse measurement  | Max.1.3 | V    |
| Reverse Current       | I <sub>R</sub>  | V <sub>R</sub> =600V, Pulse measurement  | Max.10  | μA   |
| Reverse Recovery Time | t <sub>rr</sub> | I <sub>F</sub> =0.5A, I <sub>R</sub> =1A | Max.400 | nS   |
| Junction Capacitance  | C <sub>j</sub>  | f=1MHz, V <sub>R</sub> =10V              | Typ.7   | pF   |
| Thermal Resistance    | j-l             | junction to lead                         | Max.10  | /W   |
|                       | j-a             | junction to ambient                      | Max.113 |      |

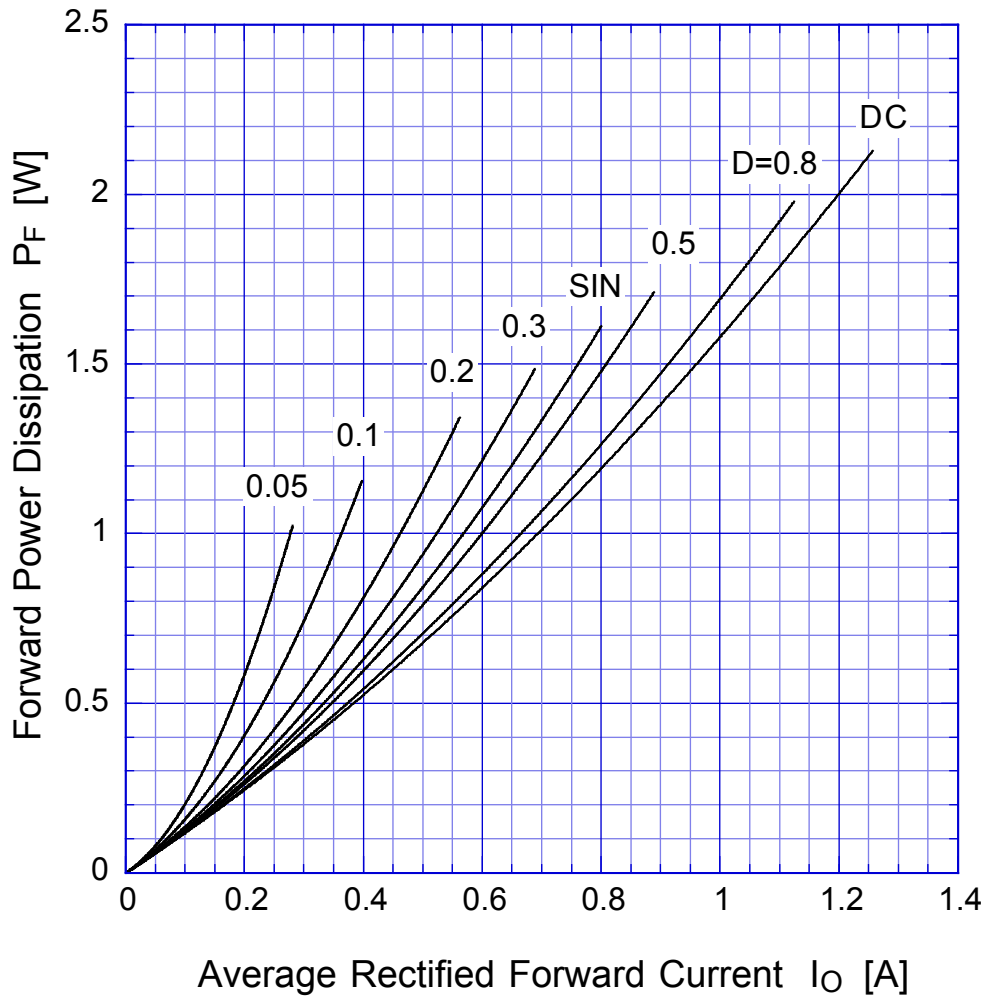


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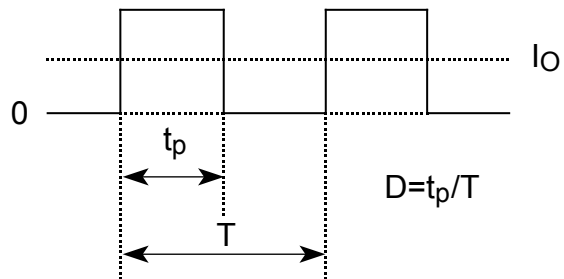
## Forward Voltage



# D1NF60 Forward Power Dissipation

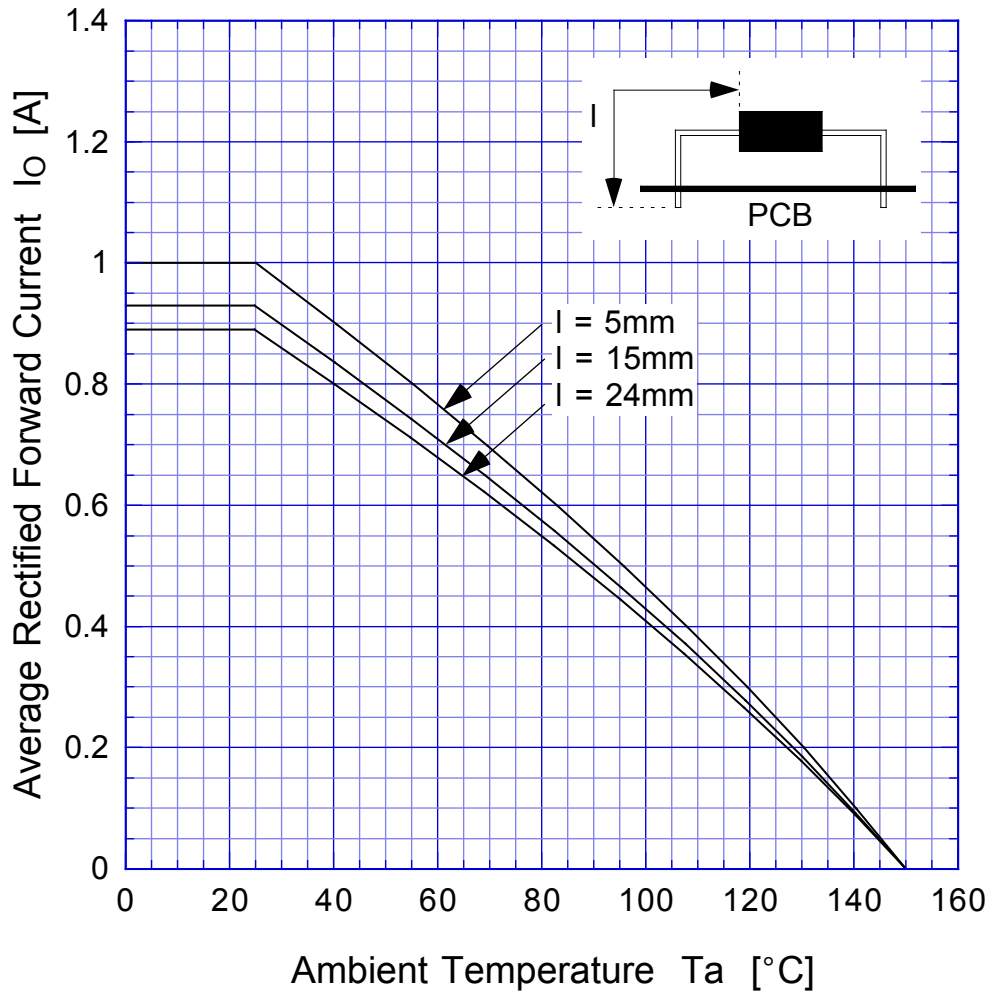


$T_j = 150^\circ\text{C}$

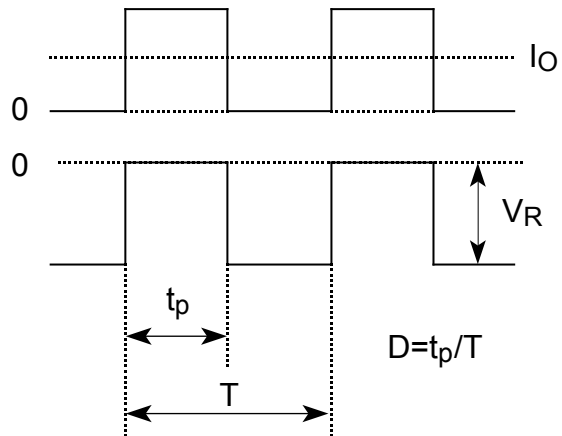


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# Derating Curve

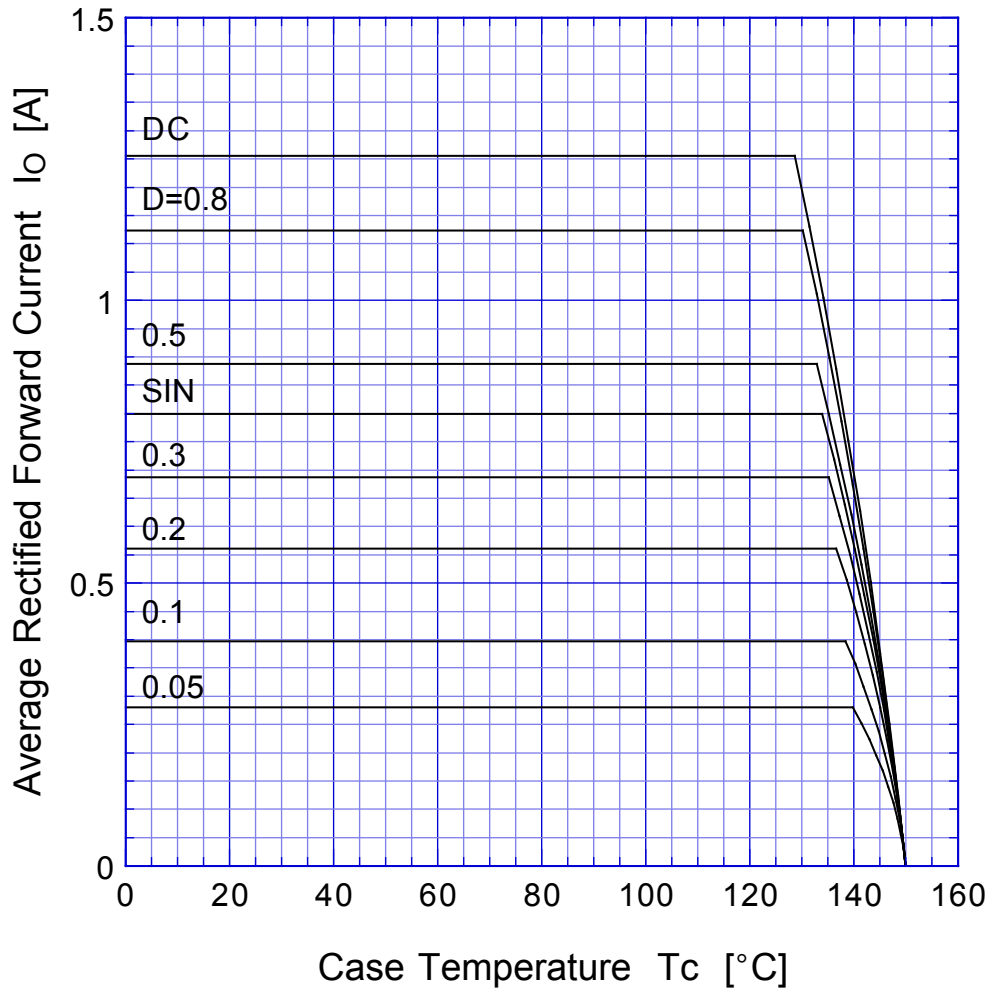


$$V_R = V_{RM}$$

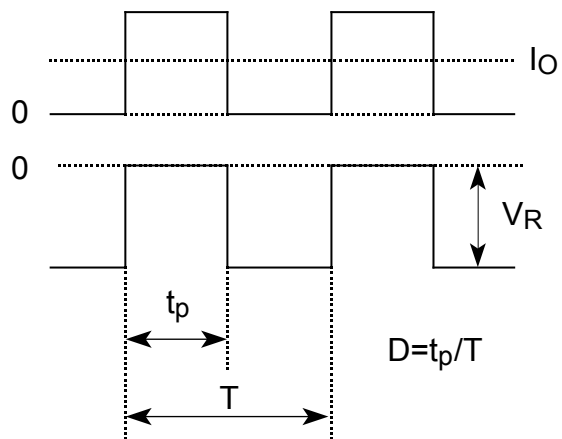


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# Derating Curve

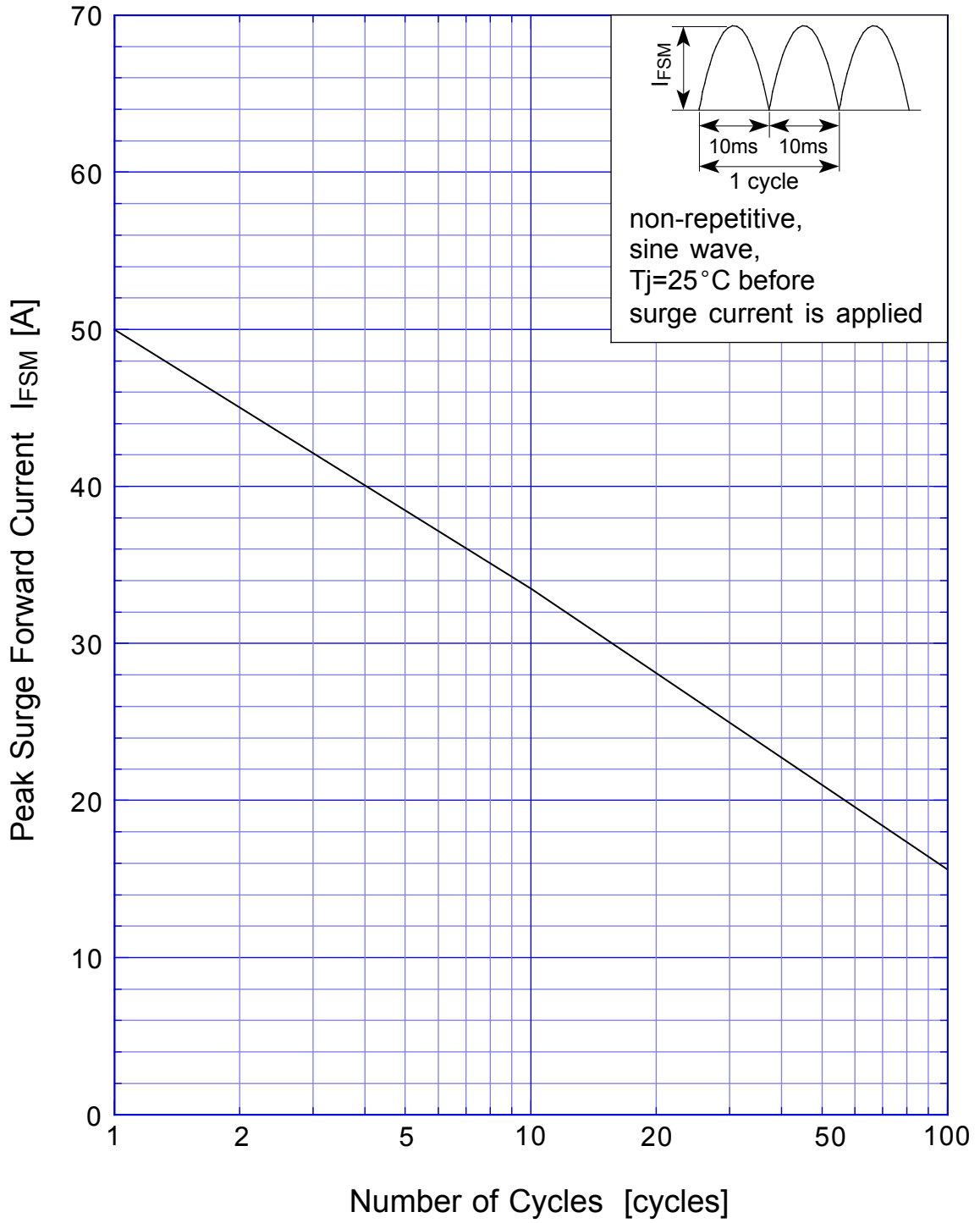


$V_R = 300V$



# D1NF60

## Peak Surge Forward Capability



# D1NF60 Junction Capacitance

