

# SHINDENGEN

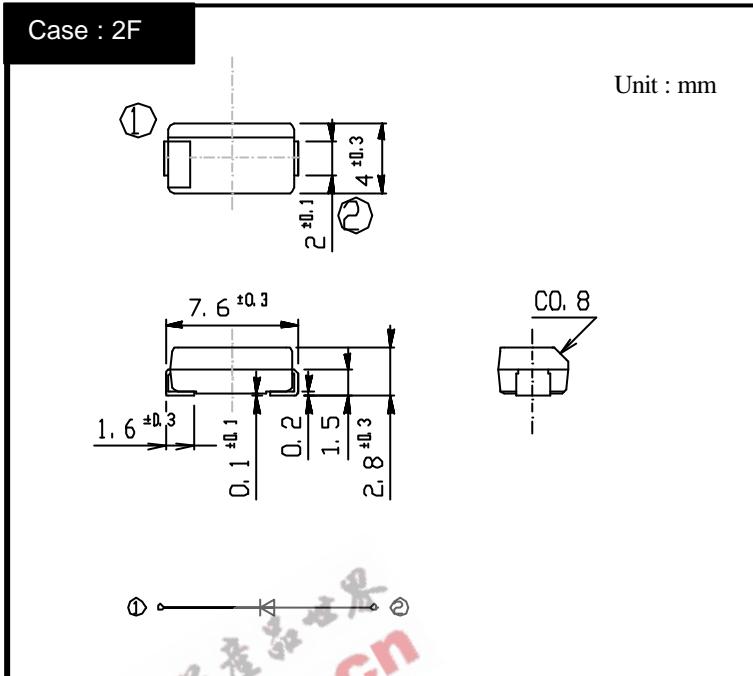
## General Purpose Rectifiers

Single

**D4F60**

**600V 4A**

### OUTLINE DIMENSIONS



### RATINGS

Absolute Maximum Ratings (If not specified  $T_J=25^\circ C$ )

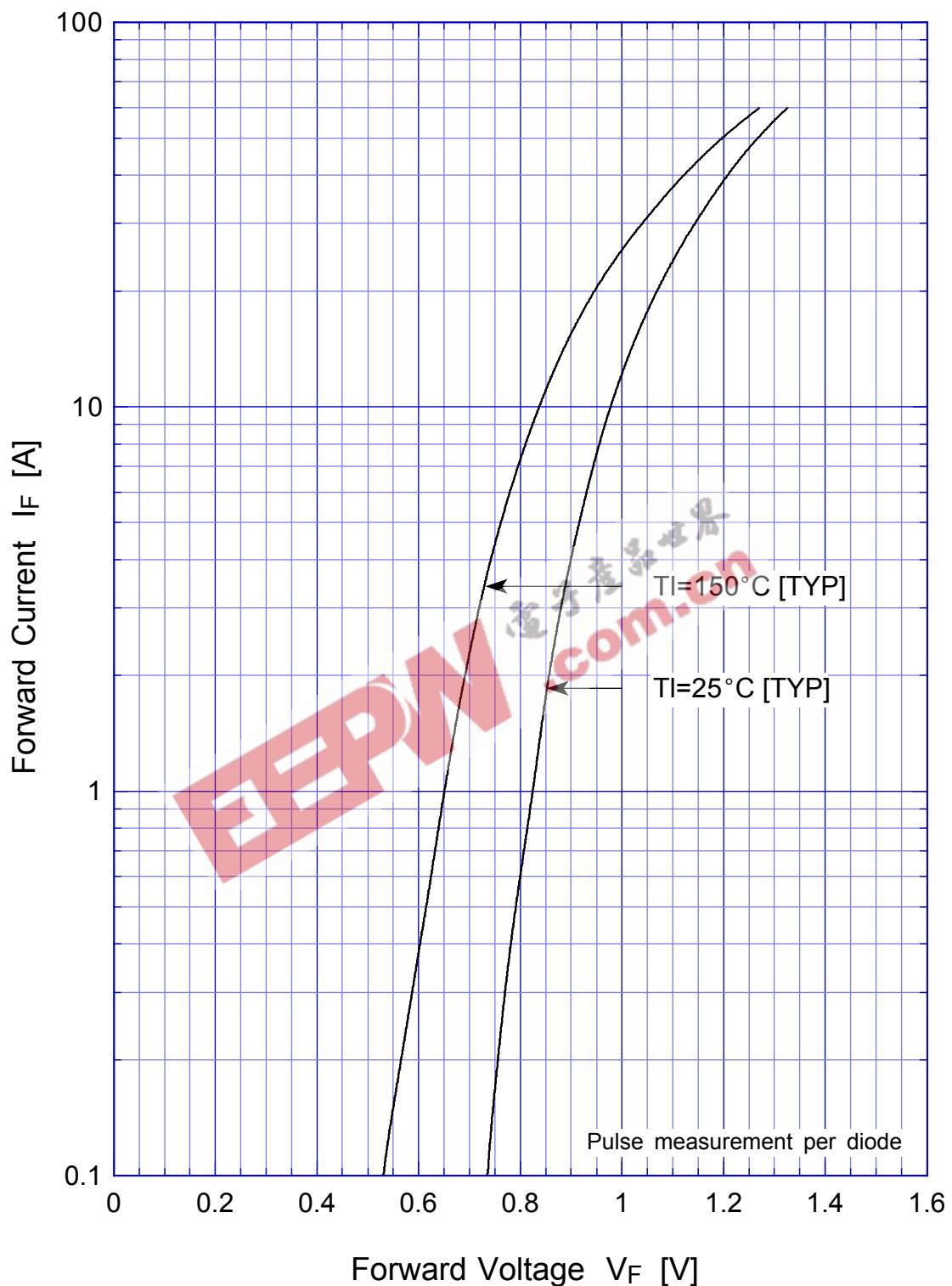
| Item                              | Symbol    | Conditions  | Ratings   | Unit |
|-----------------------------------|-----------|---|-----------|------|
| Storage Temperature               | $T_{stg}$ |   | -55 ~ 150 |      |
| Operating Junction Temperature    | $T_J$     |   | 150       |      |
| Maximum Reverse Voltage           | $V_{RM}$  |   | 600       | V    |
| Average Rectified Forward Current | $I_O$     | 50Hz sine wave, R-load $T_J=68^\circ C$                             | 4         | A    |
|                                   |           | 50Hz sine wave, R-load $T_J=25^\circ C$ On alumina substrate        | 1.85      |      |
|                                   |           | 50Hz sine wave, R-load $T_J=25^\circ C$ On glass-epoxy substrate    | 1.3       |      |
| Peak Surge Forward Current        | $I_{FSM}$ | 50Hz sine wave, Non-repetitive 1 cycle peak value, $T_J=25^\circ C$ | 200       | A    |
| Current squared time              | $I^2t$    | 1ms $t < 10m s$   | 150       | A's  |

Electrical Characteristics (If not specified  $T_J=25^\circ C$ )

| Item               | Symbol        | Conditions  | Ratings  | Unit    |
|--------------------|---------------|---|----------|---------|
| Forward Voltage    | $V_F$         | $I_F=4A$ Pulse measurement                        | Max.0.95 | V       |
| Reverse Current    | $I_R$         | $V_R=600V$ Pulse measurement                      | Max.10   | $\mu A$ |
| Thermal Resistance | $\theta_{JA}$ | $J$ junction to lead                              | Max.23   | /W      |
|                    |               | $J$ junction to ambient, On alumina substrate     | Max.80   |         |
|                    |               | $J$ junction to ambient, On glass-epoxy substrate | Max.115  |         |

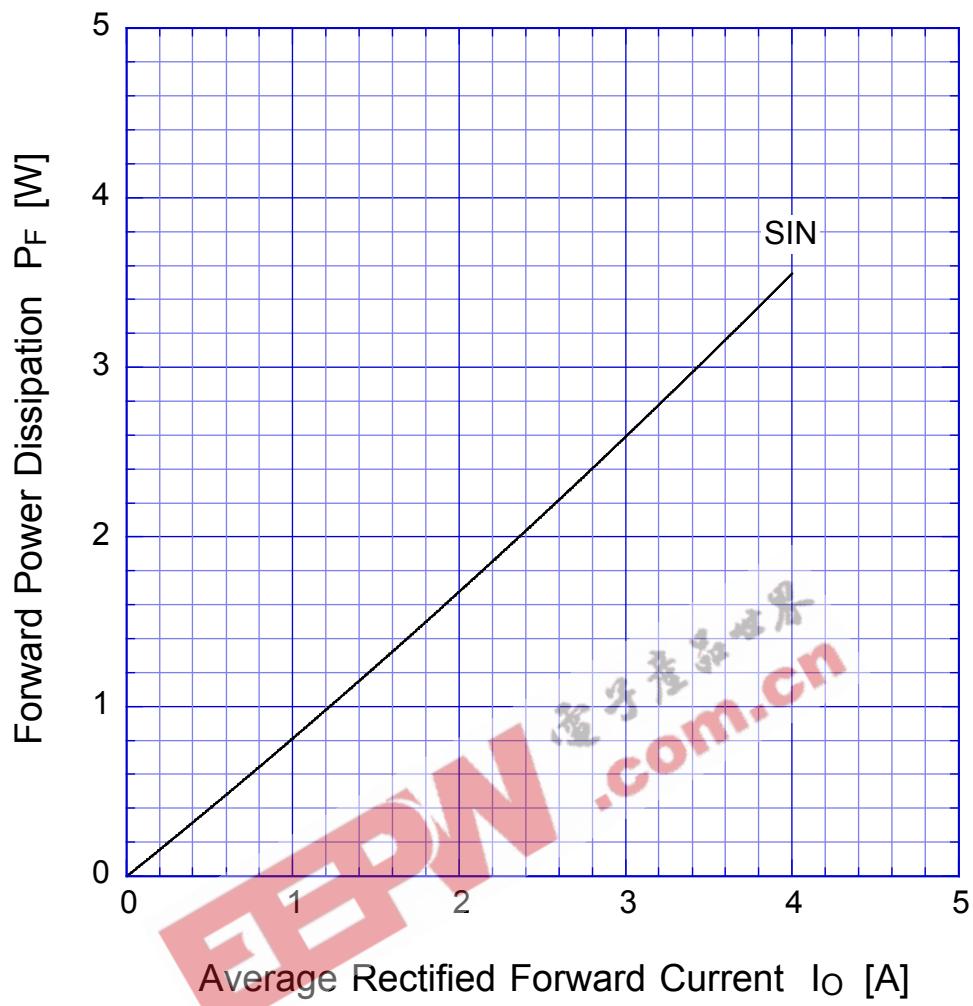
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Forward Voltage

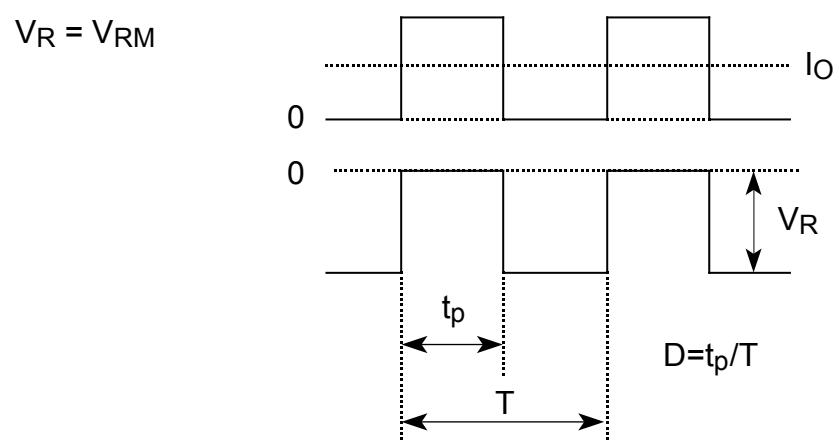
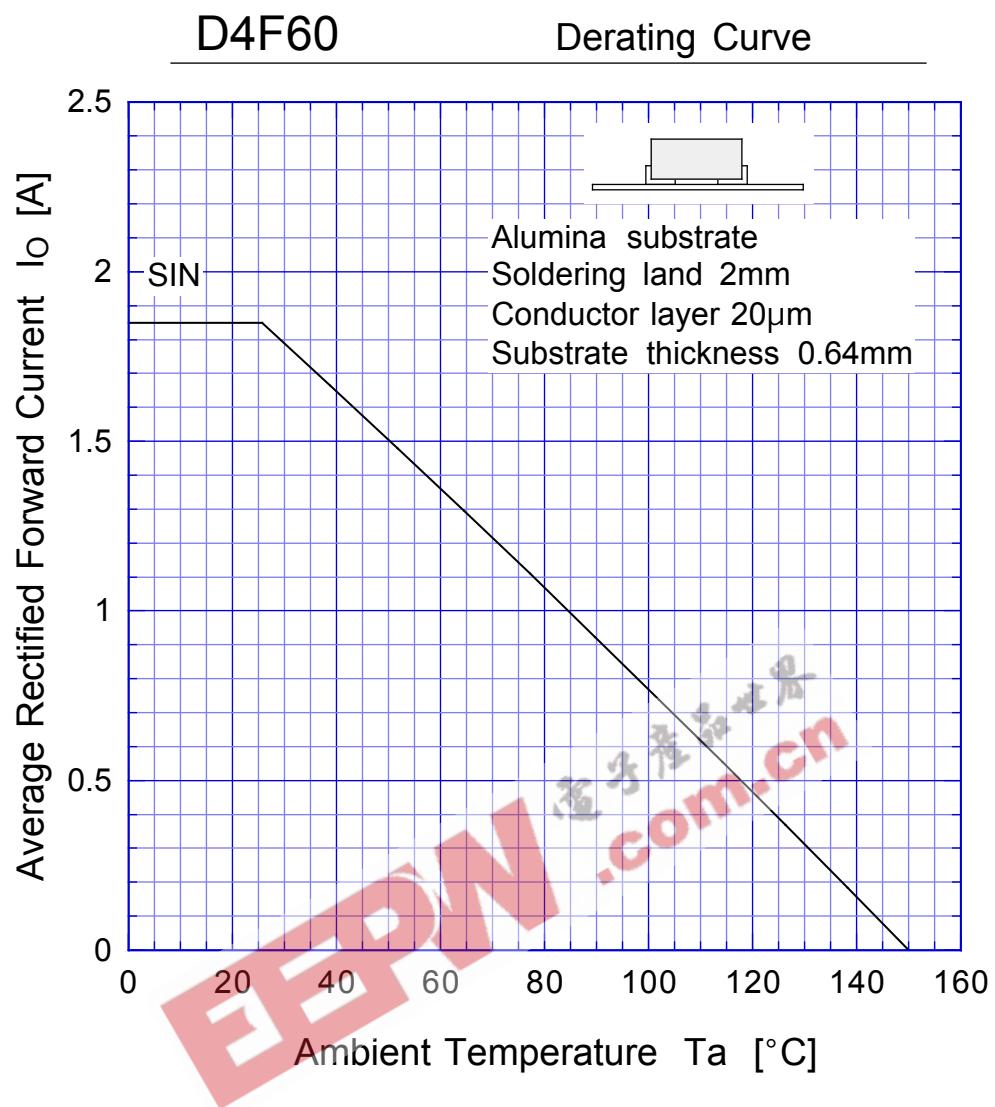


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Forward Power Dissipation

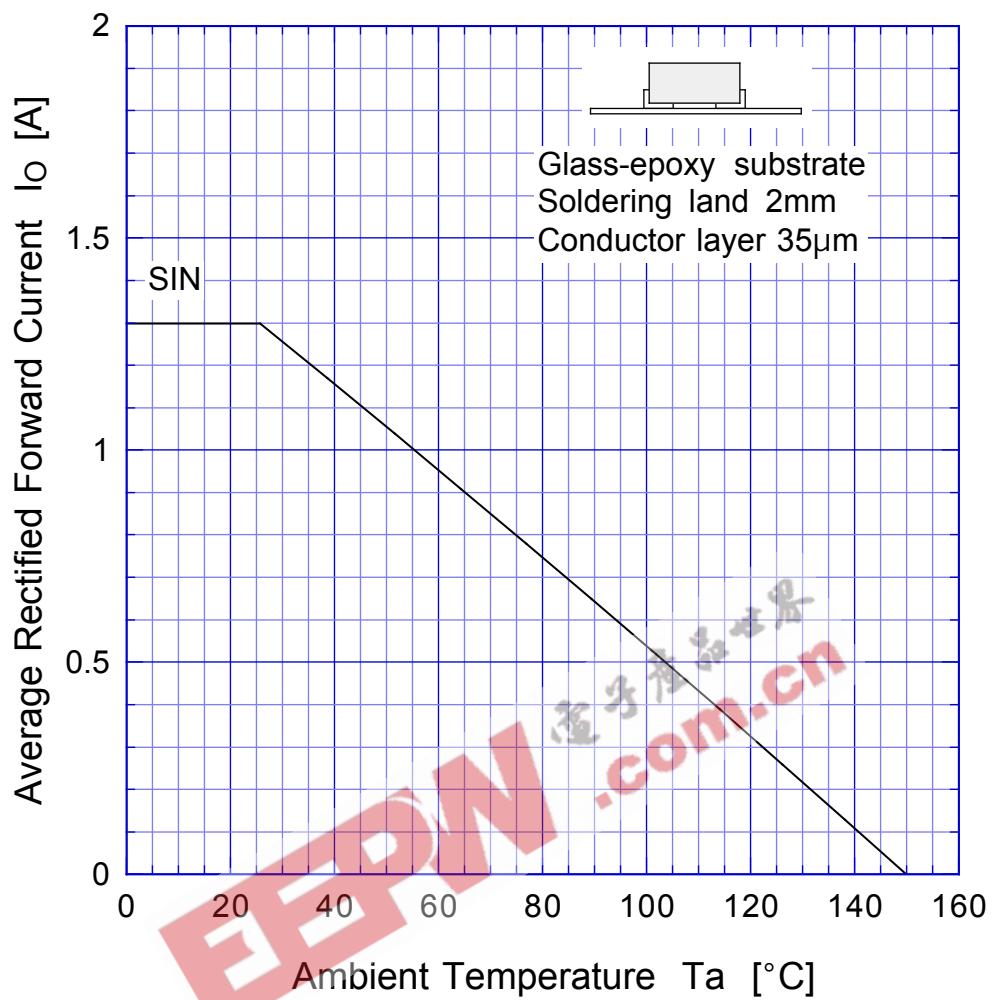


$T_j = 150^\circ\text{C}$   
Sine wave

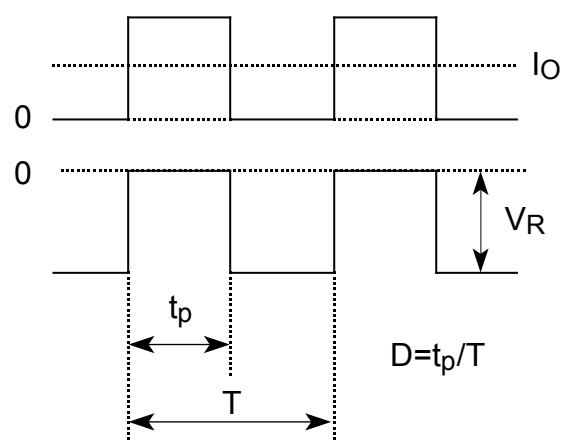


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Derating Curve

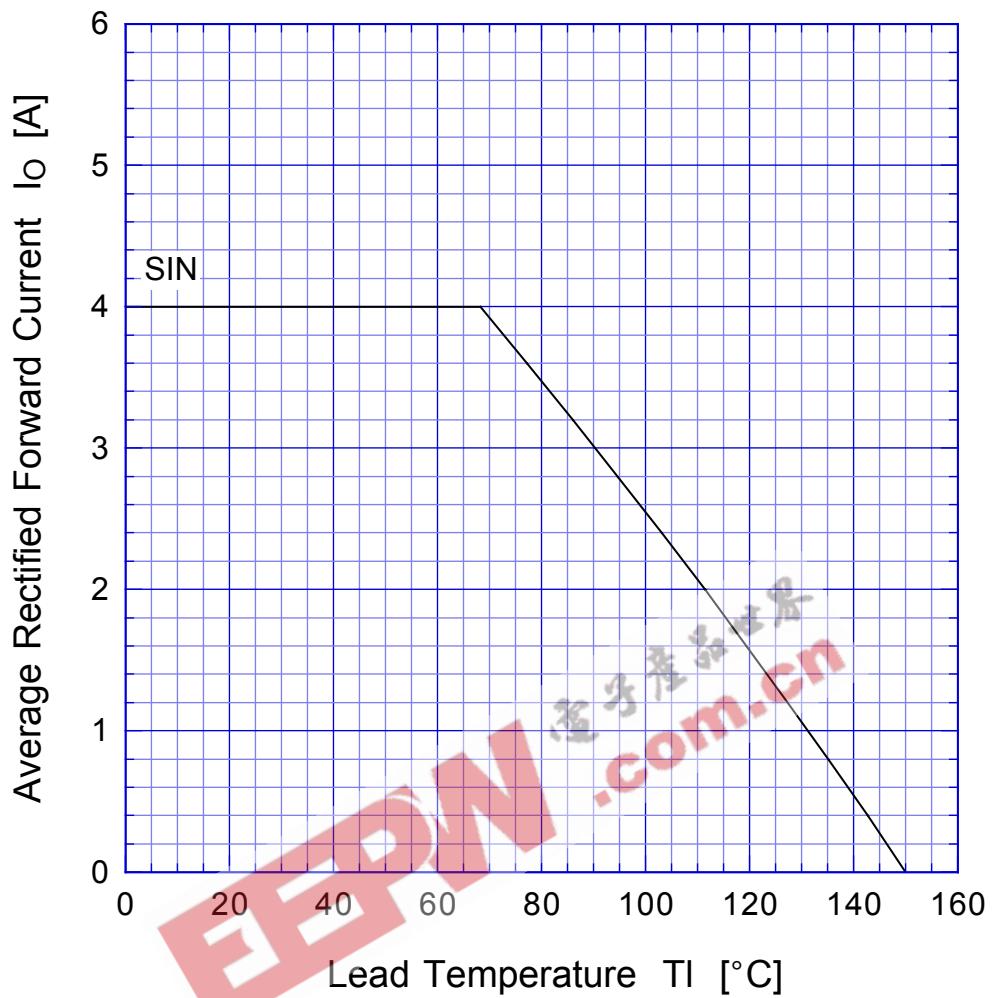


$$V_R = V_{RM}$$

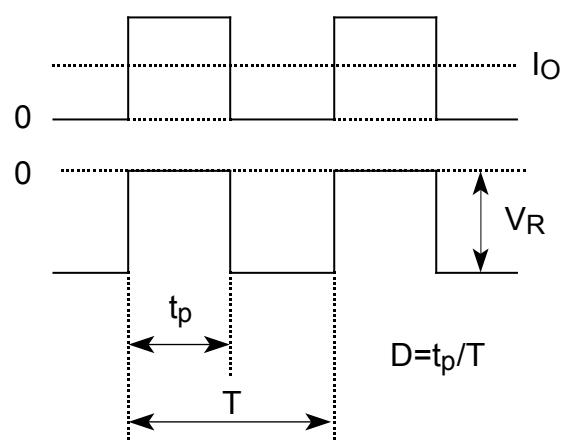


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Derating Curve



$$V_R = V_{RM}$$



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Peak Surge Forward Capability

