

# SHINDENGEN

## Super Fast Recovery Rectifiers

Single

# S2L60

## 600V 1.5A

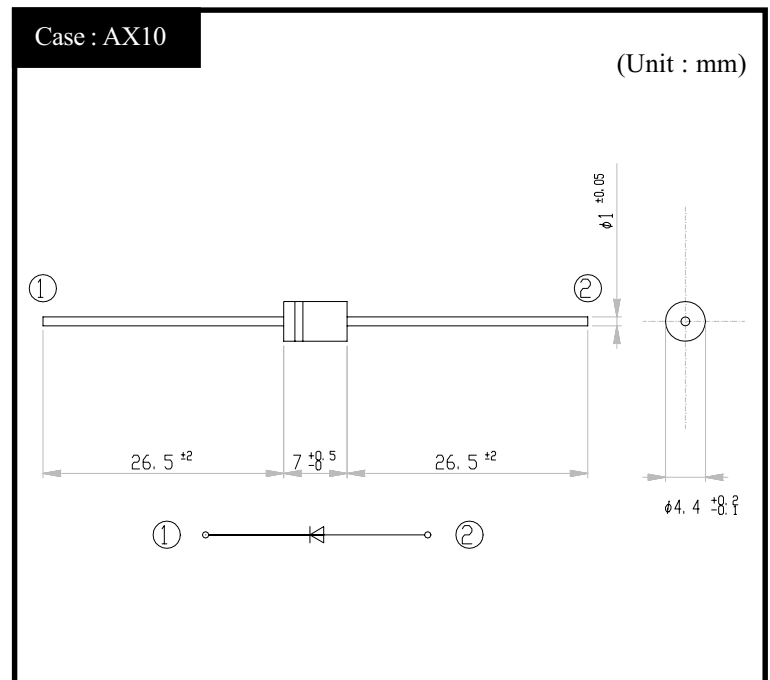
### FEATURES

- High voltage super FRD
- Low noise
- trr50ns
- Applicable to Automatic Insertion

### APPLICATION

- PFC
- Switching power supply
- Free Wheel
- Home Appliances, Office Equipment

### OUTLINE DIMENSIONS



### RATINGS

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

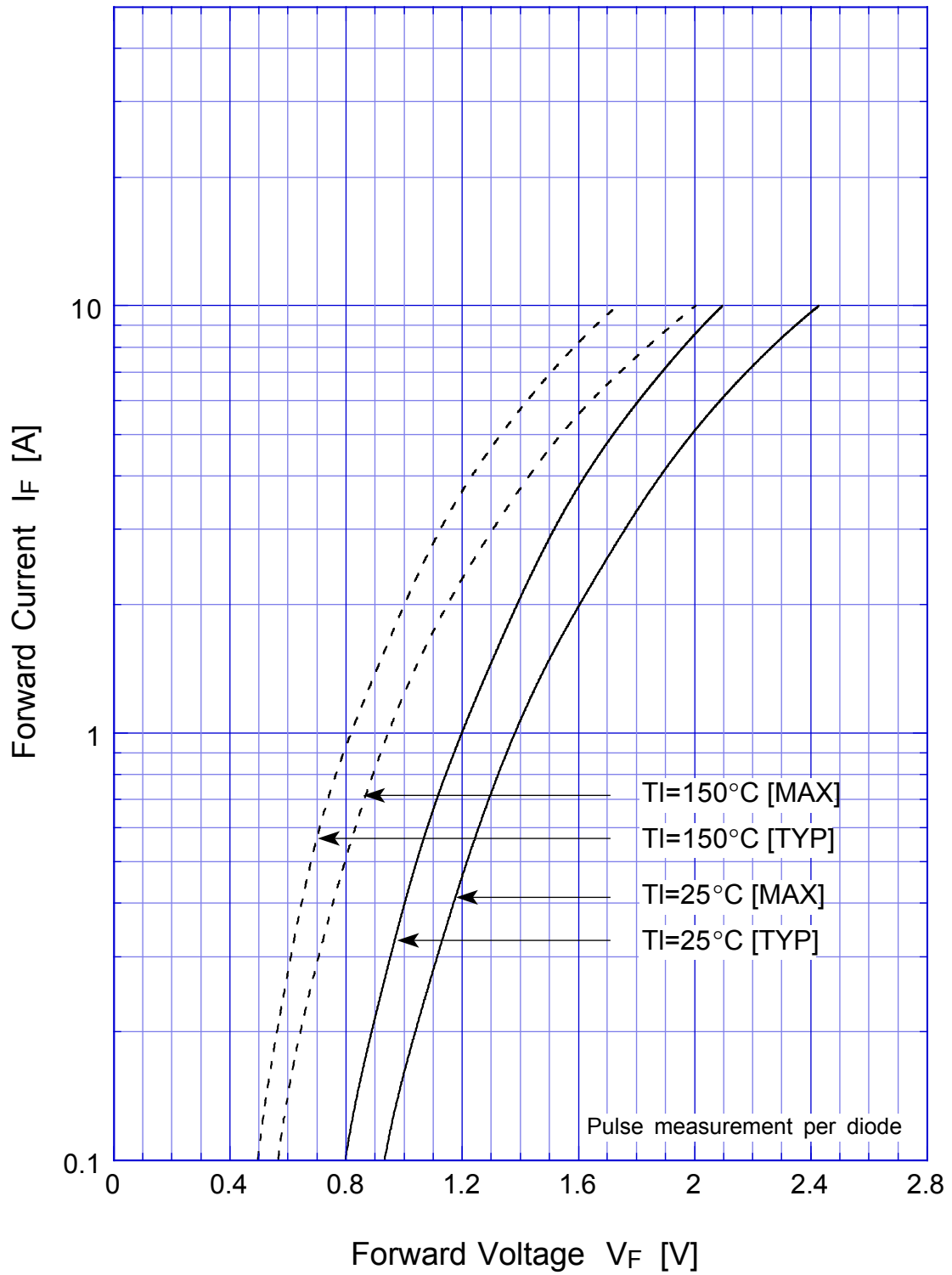
| Item                              | Symbol           | Conditions  | Ratings | Unit |
|-----------------------------------|------------------|---|---------|------|
| Storage Temperature               | T <sub>stg</sub> |   | -55~150 | °C   |
| Operating Junction Temperature    | T <sub>j</sub>   |   | 150     | °C   |
| Maximum Reverse Voltage           | V <sub>RM</sub>  |   | 600     | V    |
| Average Rectified Forward Current | I <sub>O</sub>   | 50Hz sine wave, R-load, T <sub>a</sub> =25°C                            | 1.2     | A    |
|                                   |                  | 50Hz sine wave, R-load, Tl=125°C  | 1.5     |      |
| Peak Surge Forward Current        | I <sub>FSM</sub> | 50Hz sine wave, Non-repetitive 1 cycle peak value, T <sub>j</sub> =25°C | 50      | A    |

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

| Item                  | Symbol          | Conditions  | Ratings | Unit |
|-----------------------|-----------------|---|---------|------|
| Forward Voltage       | V <sub>F</sub>  | I <sub>F</sub> =1.5A, Pulse measurement             | Max.1.5 | V    |
| Reverse Current       | I <sub>R</sub>  | V <sub>R</sub> =V <sub>RM</sub> , Pulse measurement | Max.10  | μA   |
| Reverse Recovery Time | trr             | I <sub>F</sub> =0.5A, I <sub>R</sub> =1A            | Max.50  | ns   |
| Thermal Resistance    | θ <sub>jl</sub> | junction to lead                                    | Max.12  | °C/W |
|                       | θ <sub>ja</sub> | junction to ambient                                 | Max.83  |      |

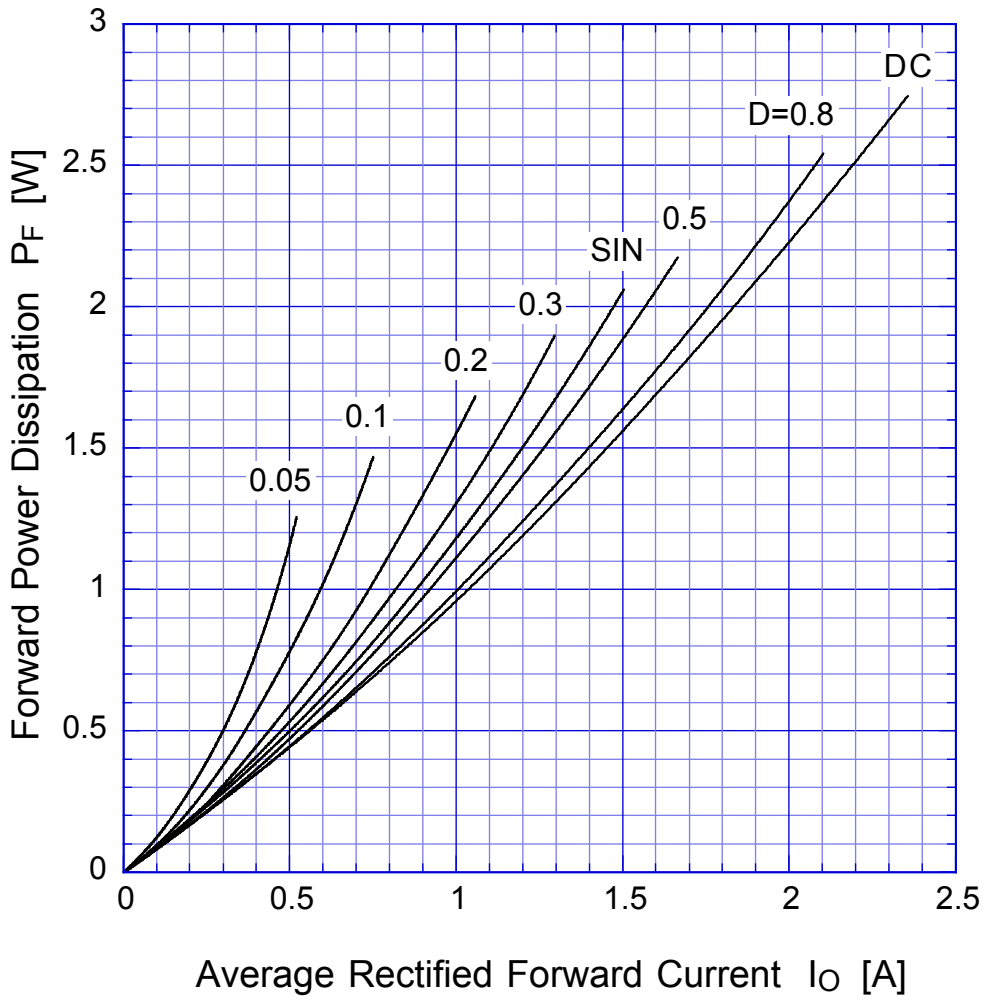
# S2L60

# Forward Voltage

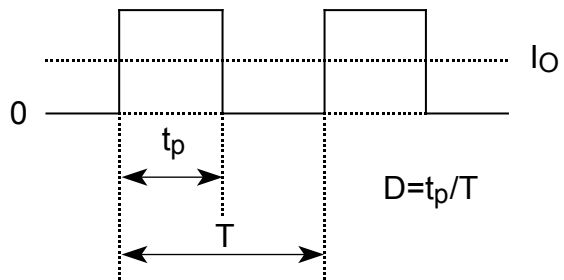


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## Forward Power Dissipation

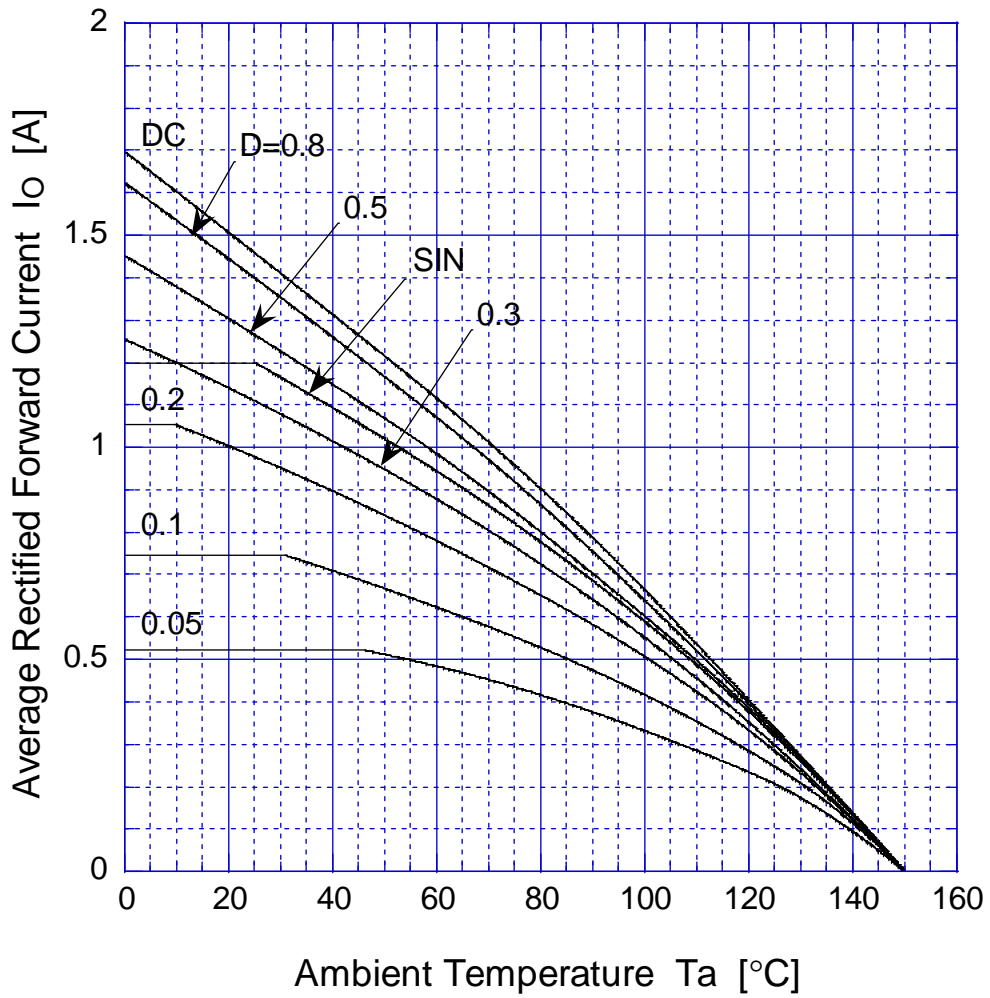


$T_j = T_{jmax}$

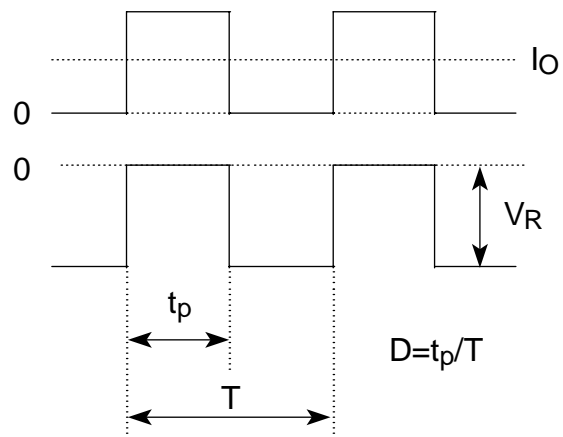


# S2L60

# Derating Curve

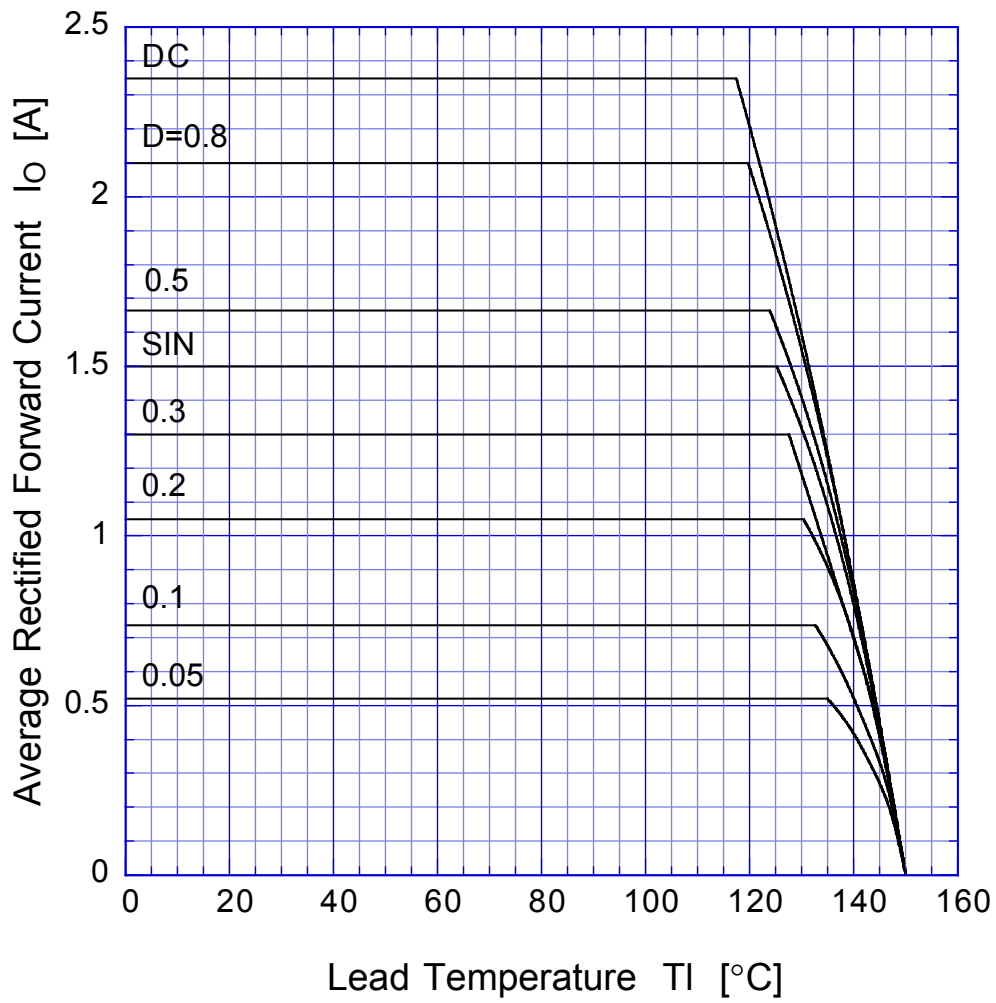


$$V_R = V_{RM}$$



# S2L60

# Derating Curve

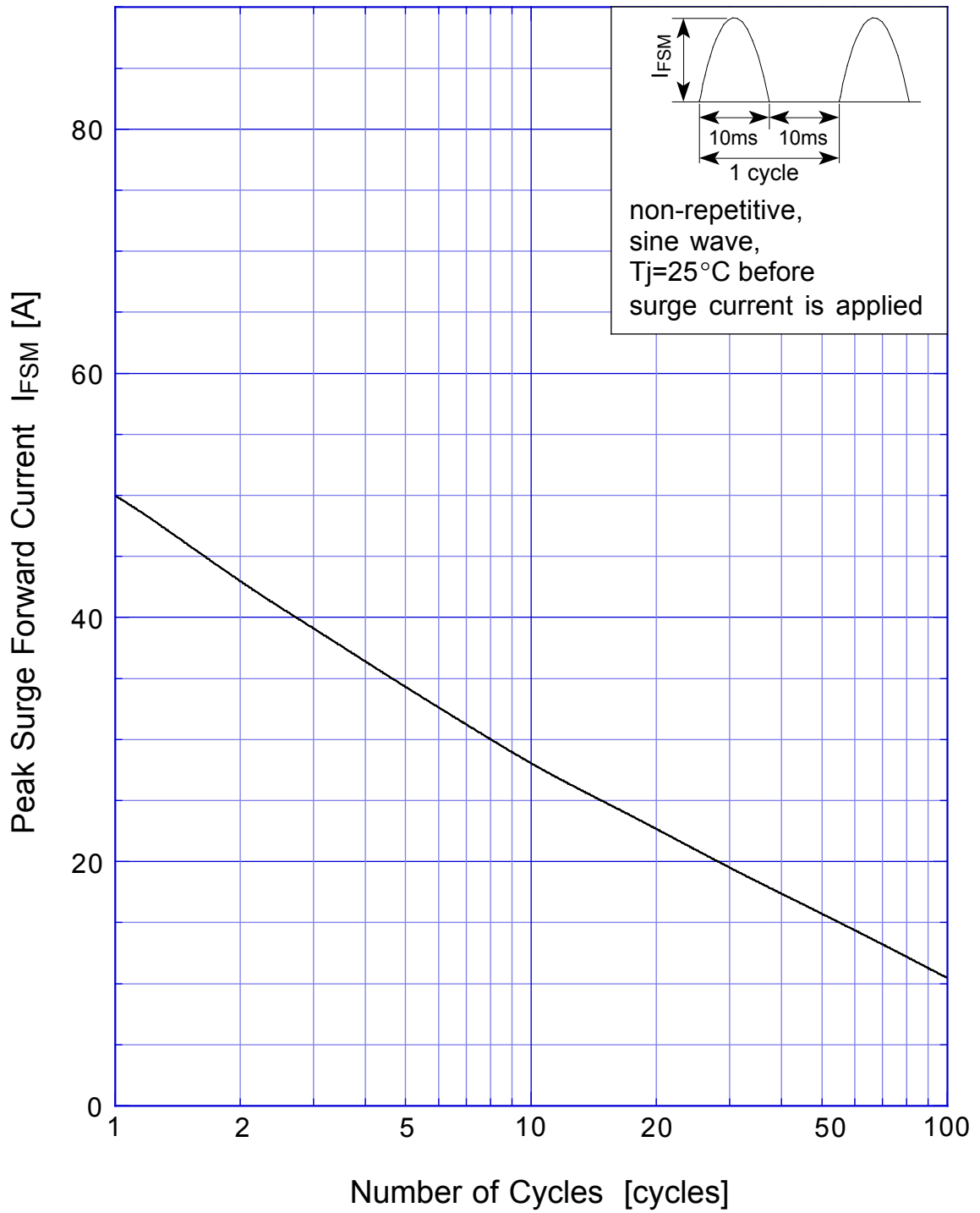


$$V_R = V_{RM}$$



# S2L60

## Peak Surge Forward Capability



# S2L60 Junction Capacitance

