

# SHINDENGEN

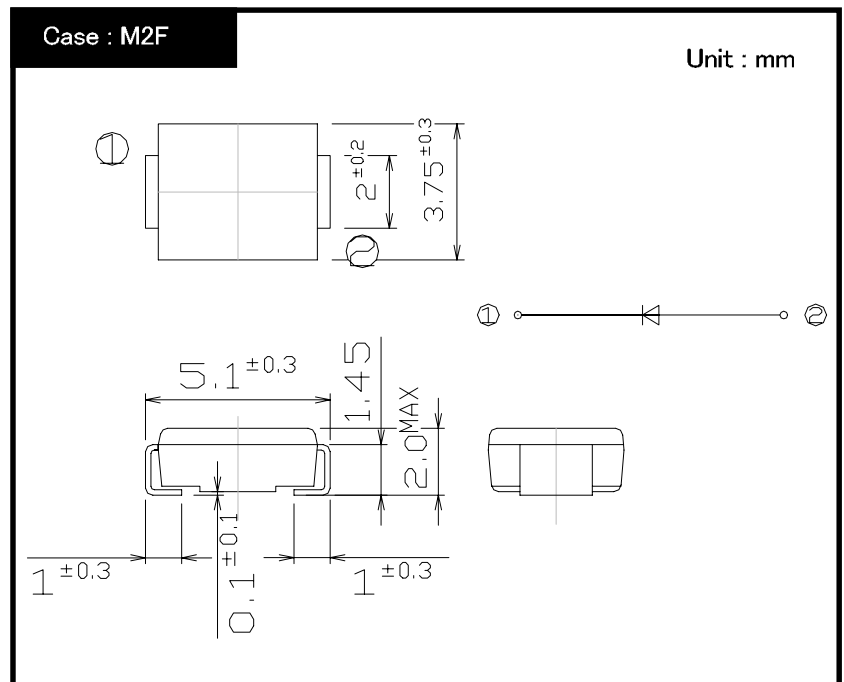
## Schottky Rectifiers (SBD)

Single

# M2FH3

## 30V 6A

### OUTLINE DIMENSIONS



### RATINGS

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

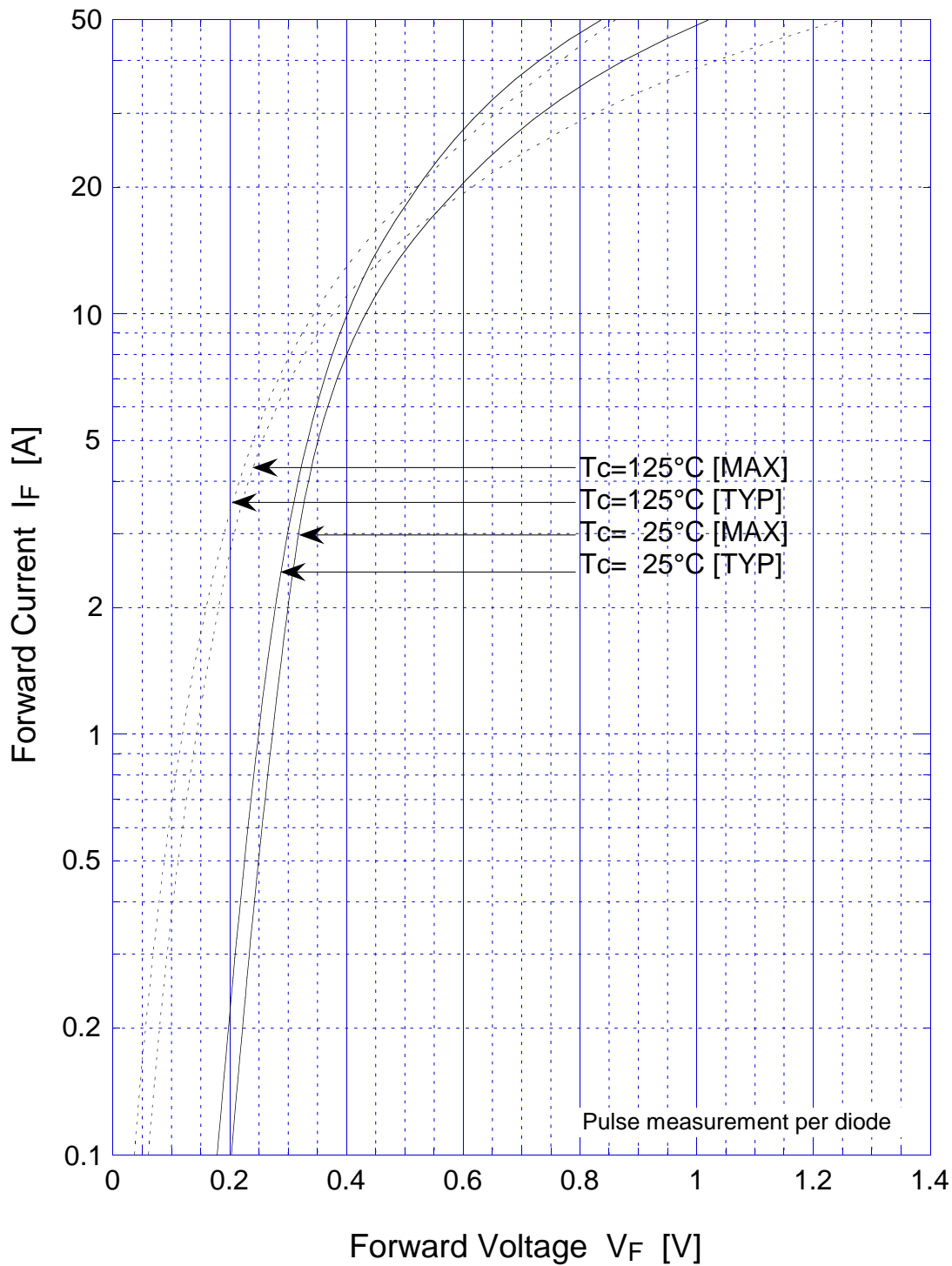
| Item                              | Symbol | Conditions   | Ratings   | Unit |
|-----------------------------------|--------|--|-----------|------|
| Storage Temperature               | Tstg   |  | -55 ~ 125 | °C   |
| Operating Junction Temperature    | Tj     |  | 125       | °C   |
| Maximum Reverse Voltage           | VRM    |  | 30        | V    |
| Average Rectified Forward Current | IO     | 50Hz sine wave, R-load Tc=70°C On glass-epoxy substrate    | 6         | A    |
| Peak Surge Forward Current        | IFSM   | 50Hz sine wave, Non-repetitive 1 cycle peak value, Tj=25°C | 110       | A    |

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

| Item                 | Symbol | Conditions                                   | Ratings  | Unit |
|----------------------|--------|--|----------|------|
| Forward Voltage      | VF     | IF=2.0A, Pulse measurement                   | Max.0.30 | V    |
|                      |        | IF=6.0A, Pulse measurement                   | Max.0.36 |      |
| Reverse Current      | IR     | VR=30V, Pulse measurement                    | Max.4.0  | mA   |
| Junction Capacitance | Cj     | f=1MHz, VR=10V                               | Typ.240  | pF   |
| Thermal Resistance   | θjc    | junction to case                             | Max.14   | °C/W |
|                      | θjl    | junction to lead                             | Max.16   |      |
|                      | θja    | junction to ambient On glass-epoxy substrate | Max.55   |      |

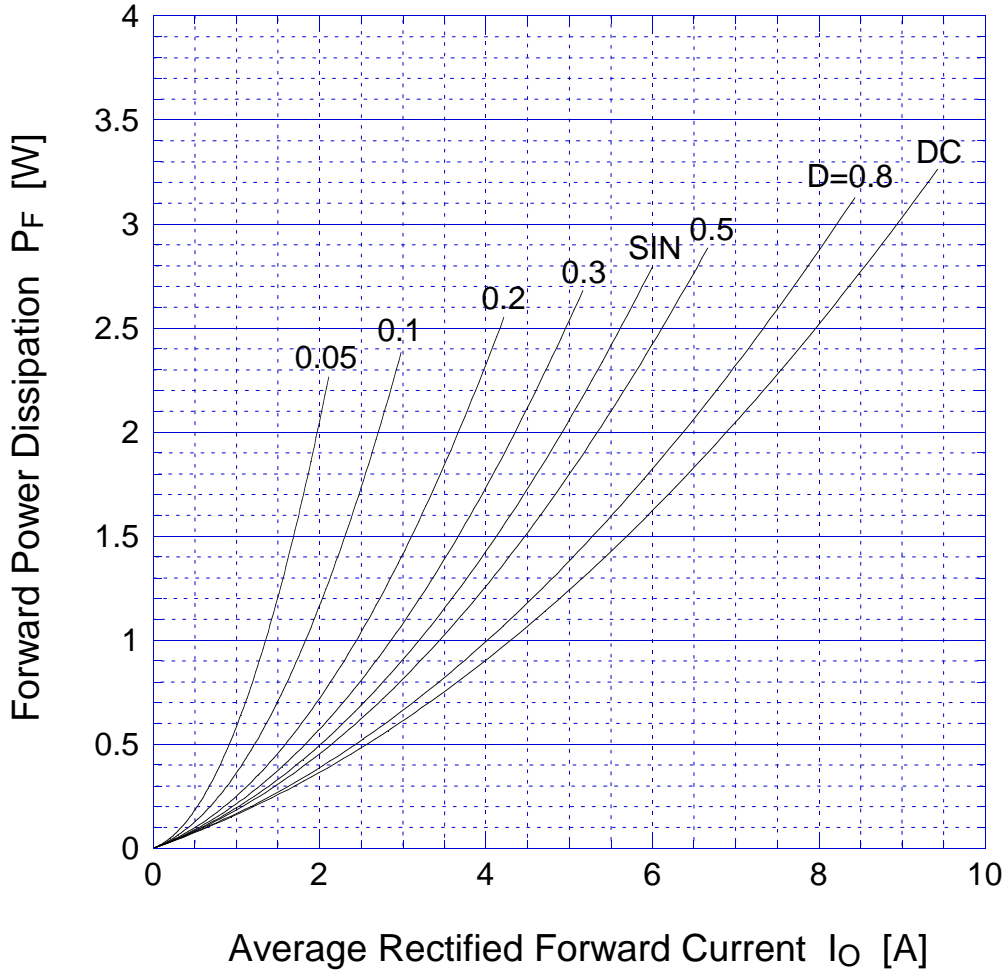
# M2FH3

# Forward Voltage

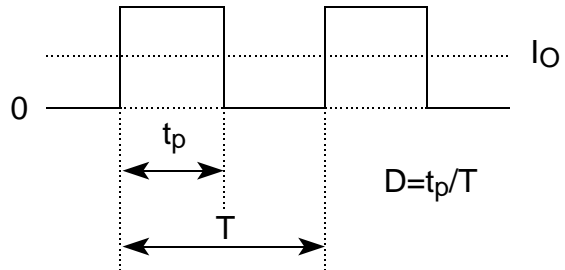


# M2FH3

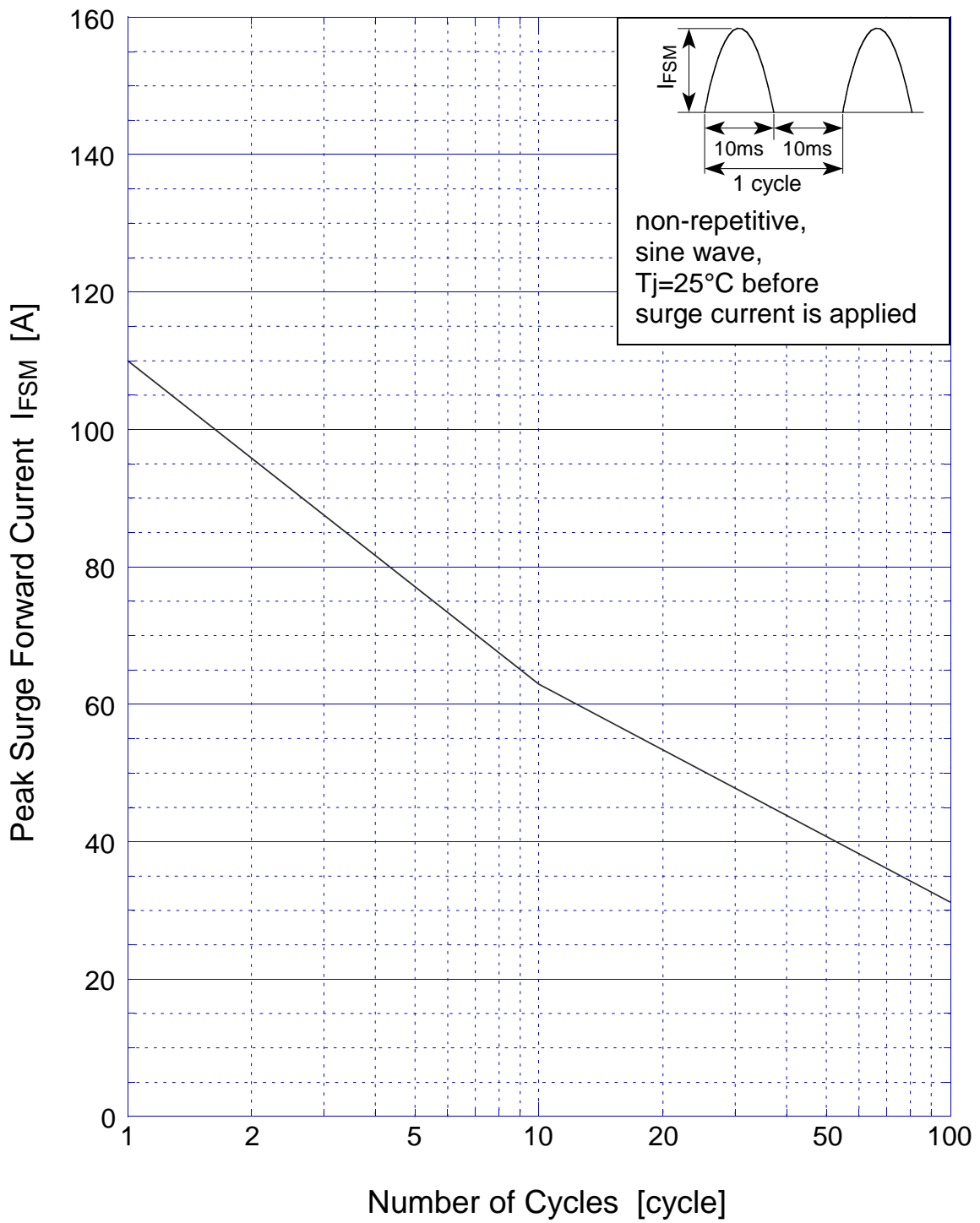
# Forward Power Dissipation



$T_j = 125^\circ\text{C}$

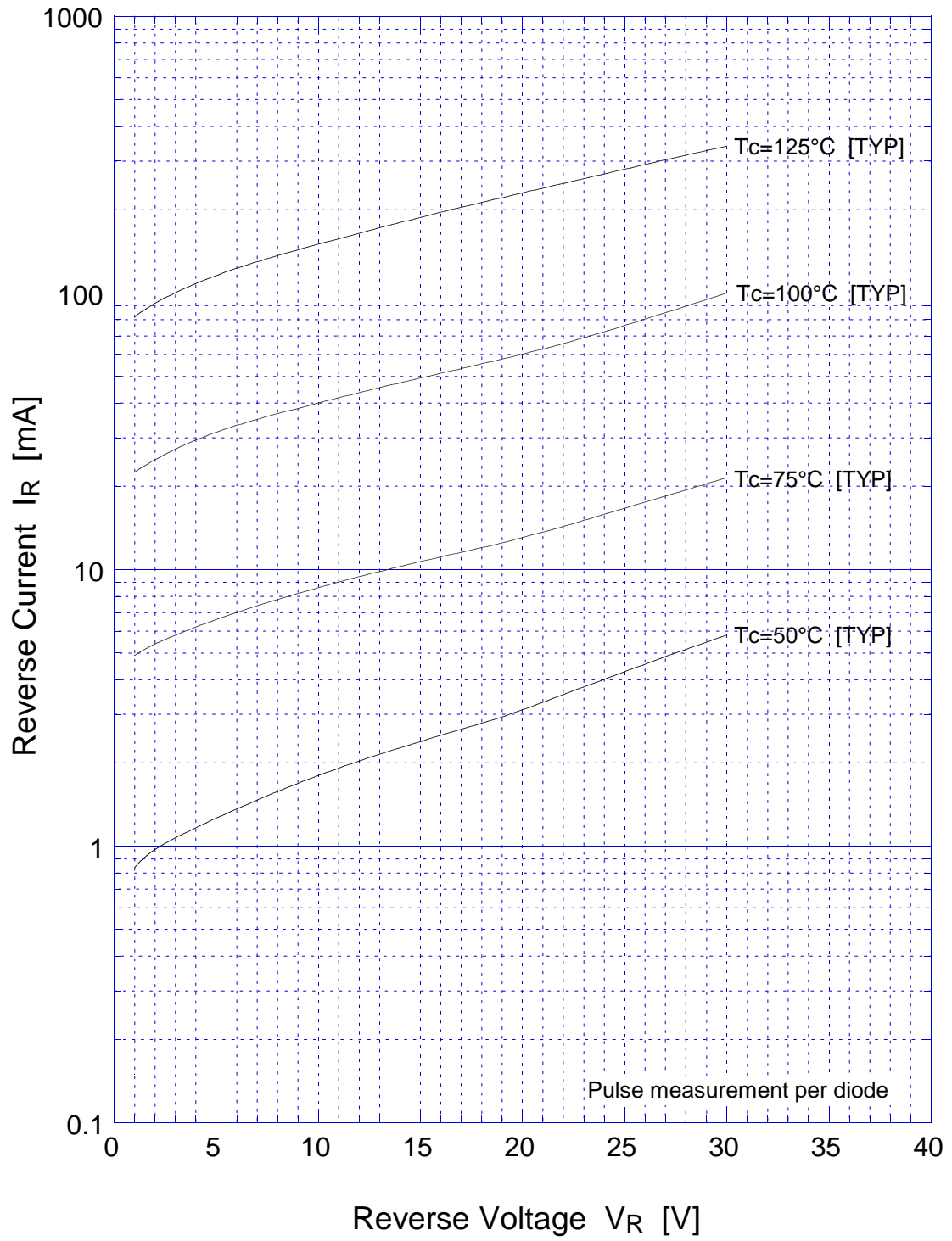


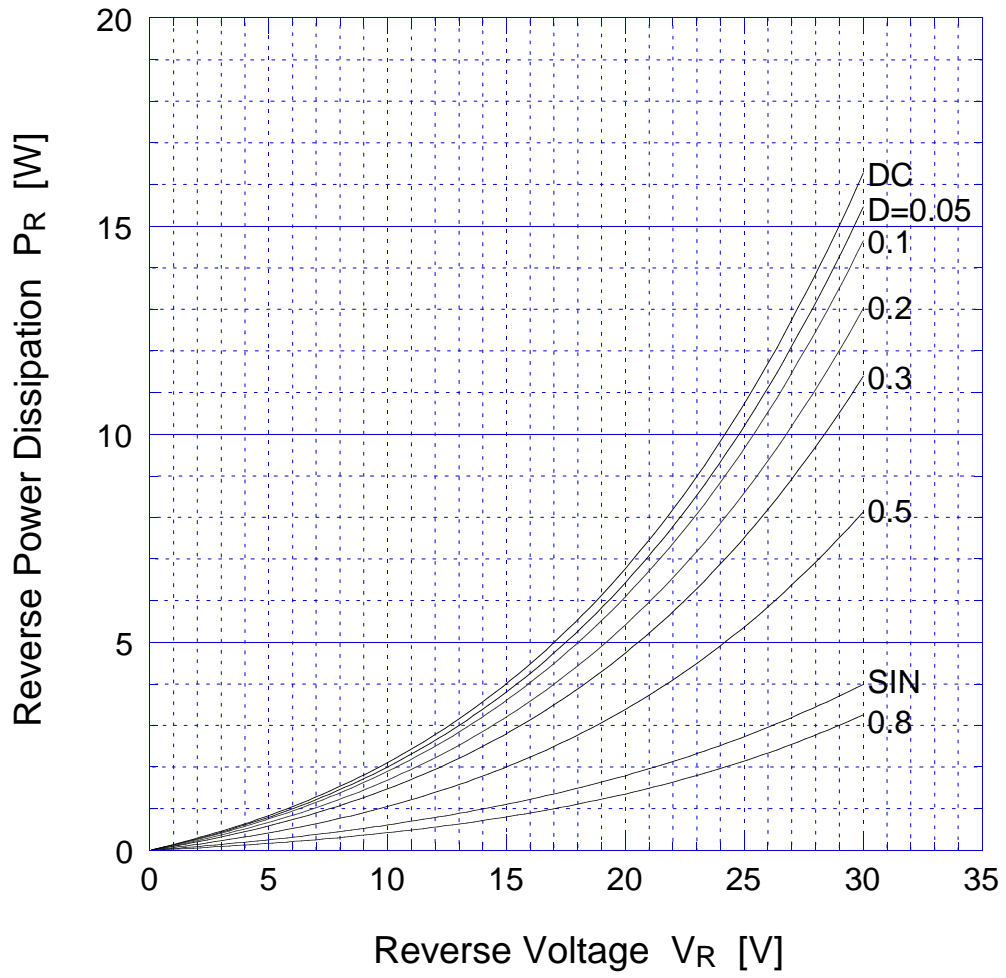
# M2FH3 Peak Surge Forward Capability



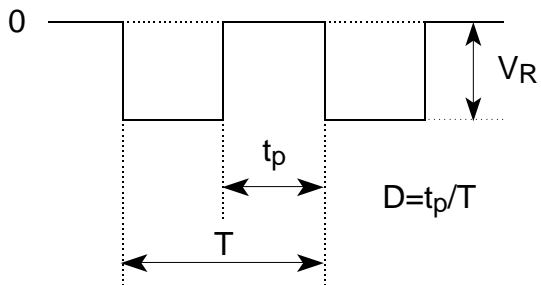
# M2FH3

# Reverse Current

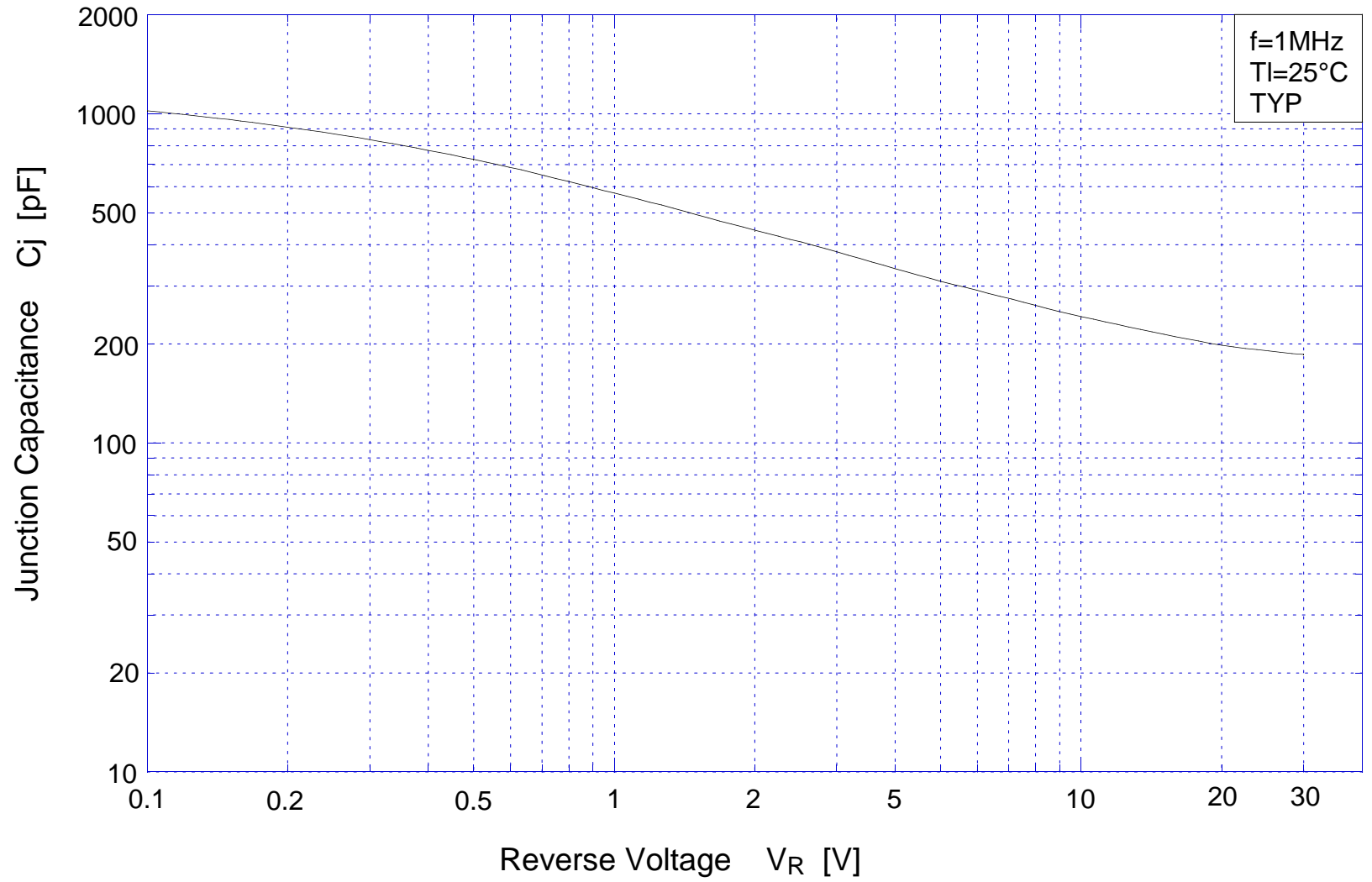




$T_j = 125^\circ\text{C}$

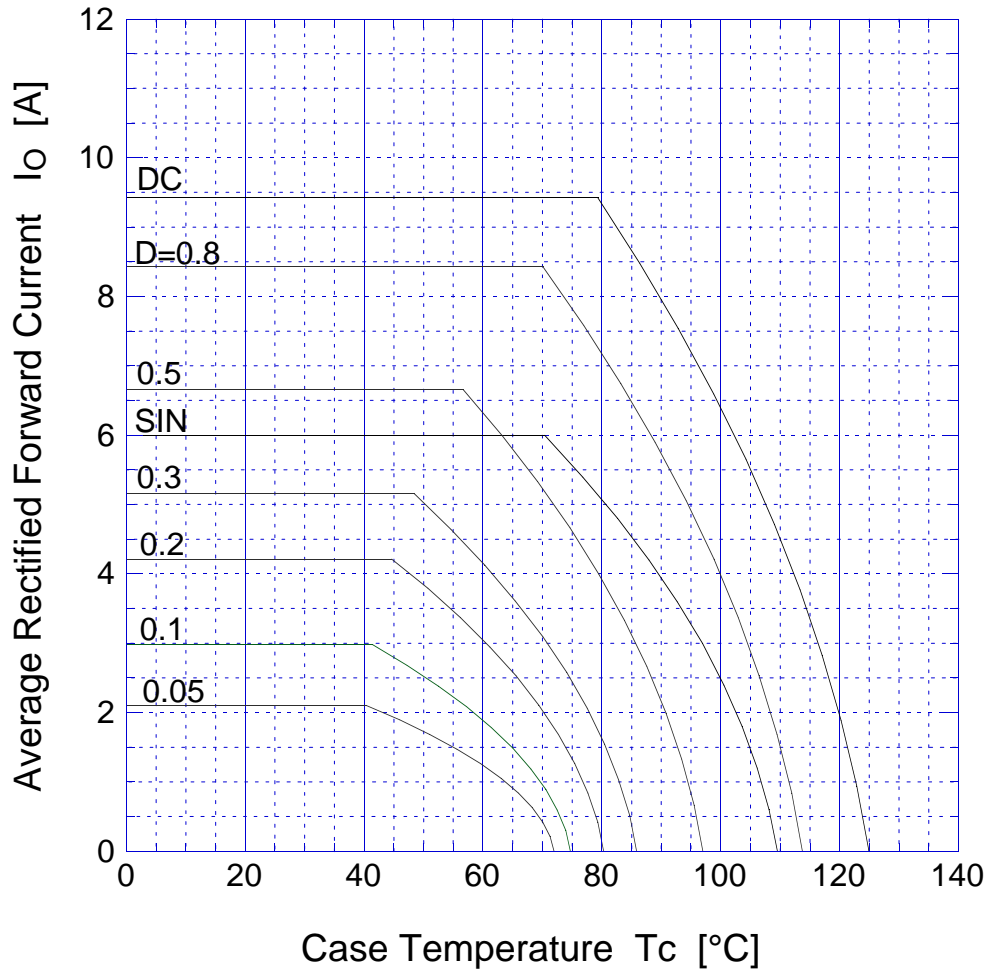


## M2FH3 Junction Capacitance

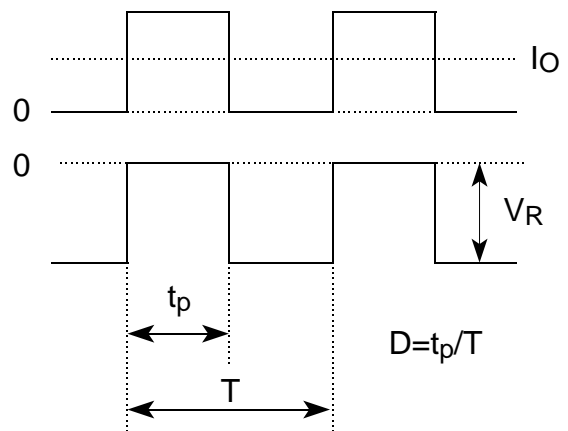


# M2FH3

# Derating Curve



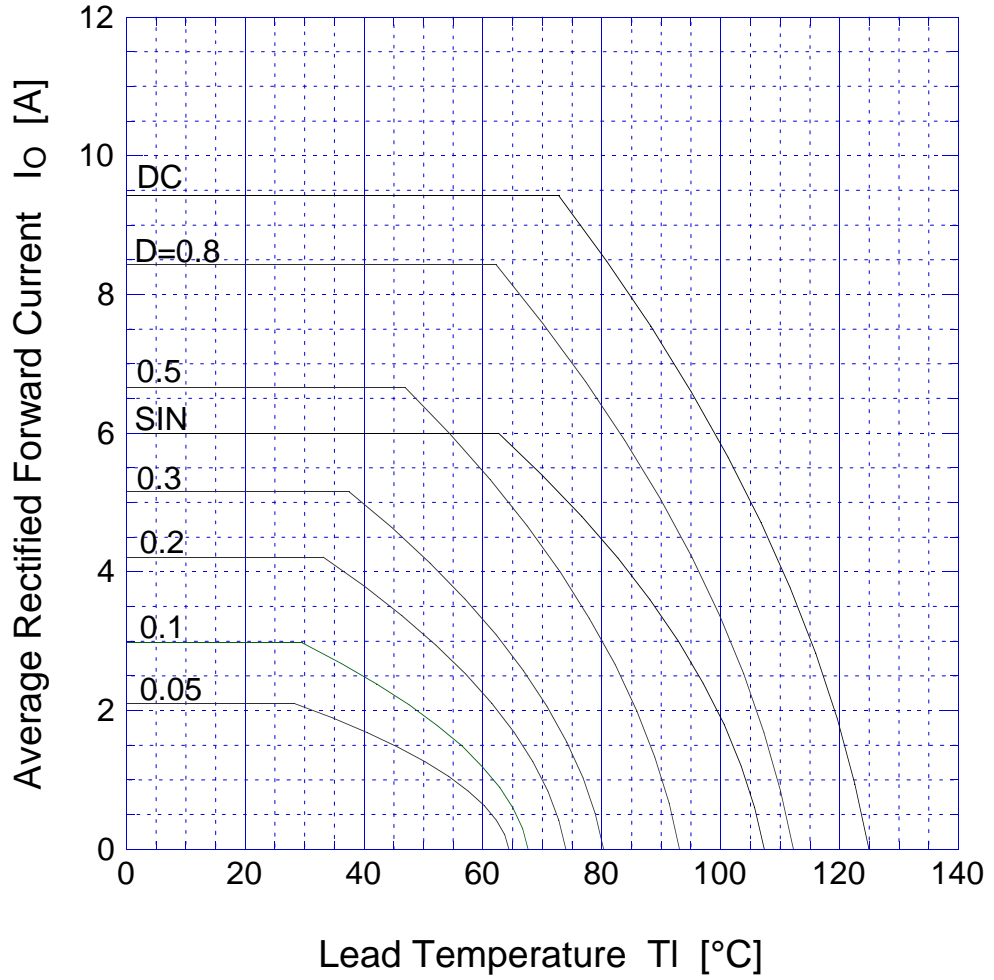
$V_R = 15V$



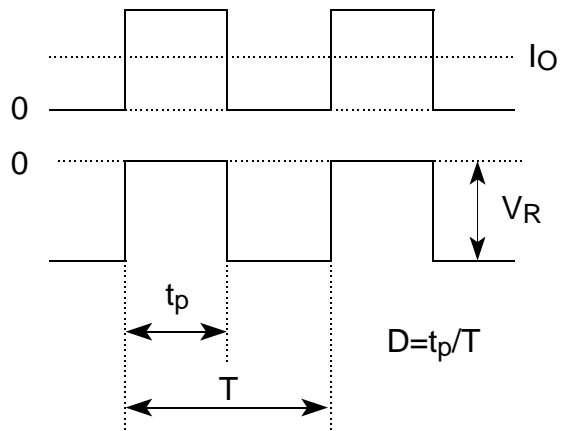


# M2FH3

# Derating Curve

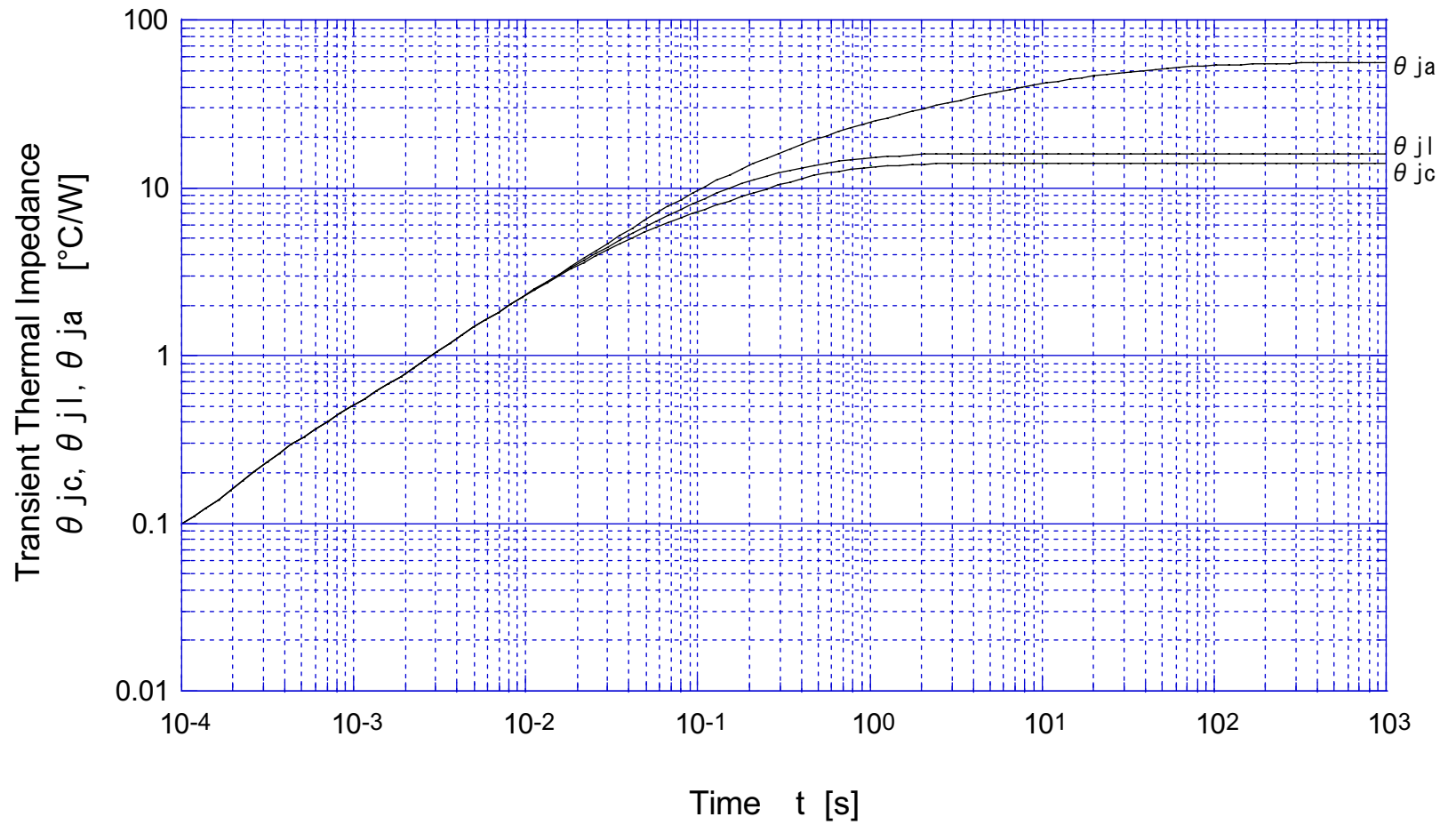


$V_R = 15V$



# M2FH3 Transient Thermal Impedance

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M2FH3  $\theta_{ja}$  - Conductor pattern area

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