

# SHINDENGEN

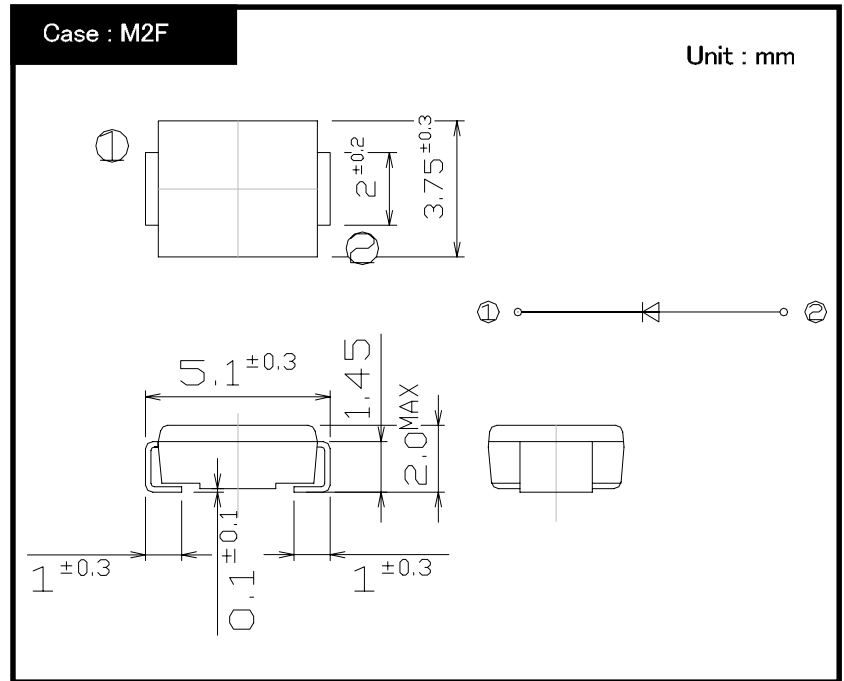
## Schottky Rectifiers (SBD)

Single

# M2FM3

## 30V 6A

### OUTLINE DIMENSIONS



### RATINGS

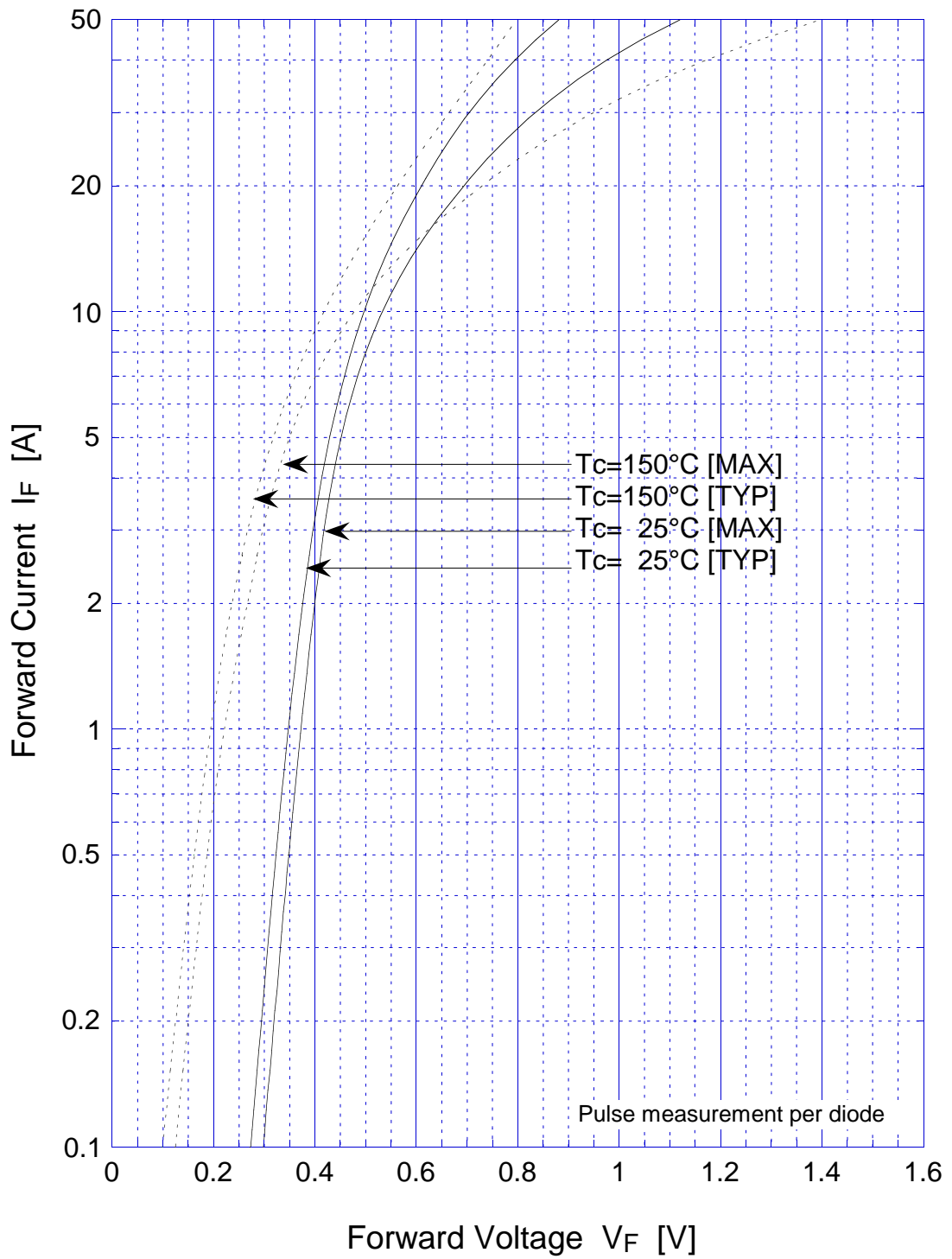
#### ● Absolute Maximum Ratings (Tc=25°C)

Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	Tstg		-55~150	°C
Operating Junction Temperature	Tj		150	°C
Maximum Reverse Voltage	VRM		30	V
Average Rectified Forward Current	Io	50Hz sine wave, R-load Ta=25°C On glass-epoxy substrate	4.3	A
		50Hz sine wave, R-load Tc=99°C	6.0	
Peak Surge Forward Current	IFSM	50Hz sine wave, Non-repetitive 1 cycle peak value, Tj=25°C	120	A

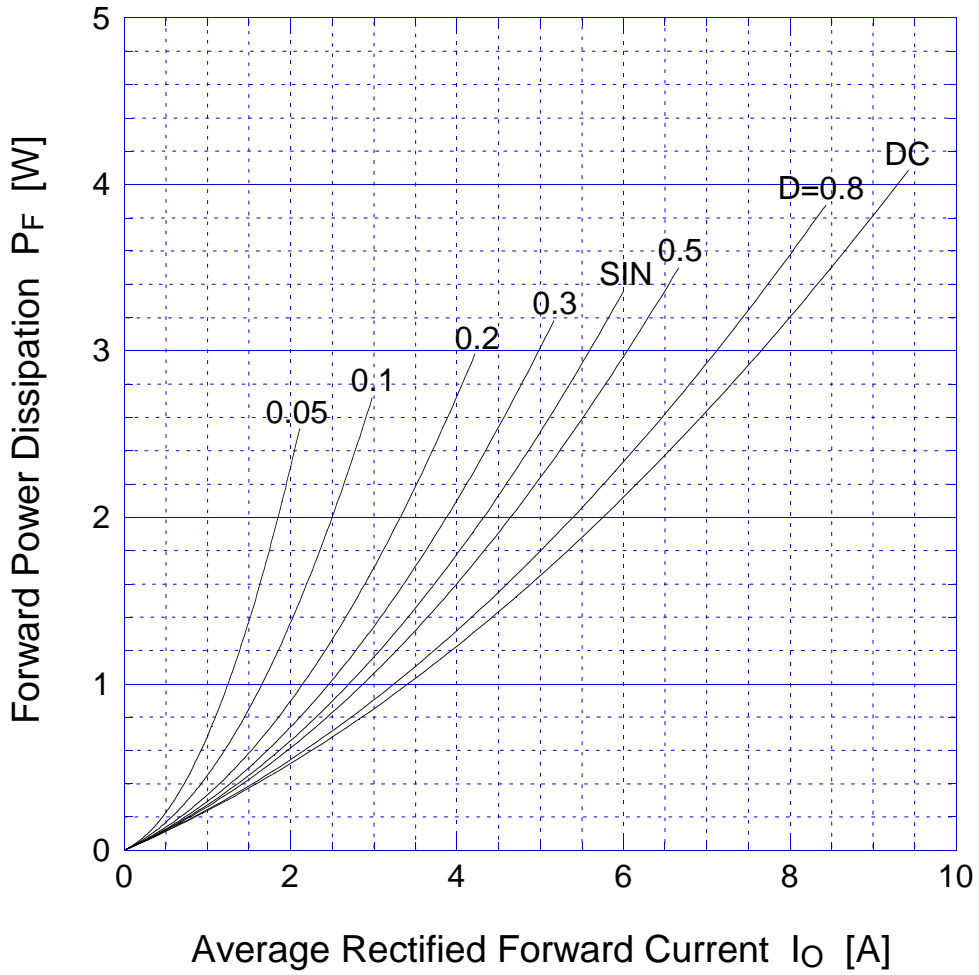
#### ● Electrical Characteristics Tc=25°C

Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	VF1	IF=2.0A, Pulse measurement	Max.0.40	V
	VF2	IF=6.0A, Pulse measurement	Max.0.46	
Reverse Current	IR	VR=VRM, Pulse measurement	Max.0.2	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	

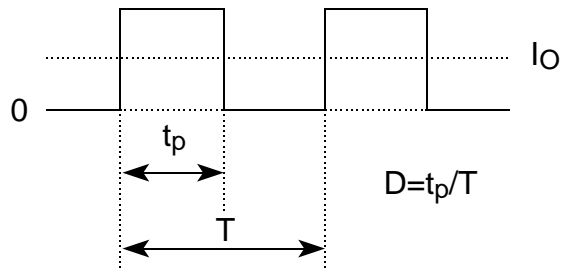
# M2FM3 Forward Voltage



# M2FM3 Forward Power Dissipation

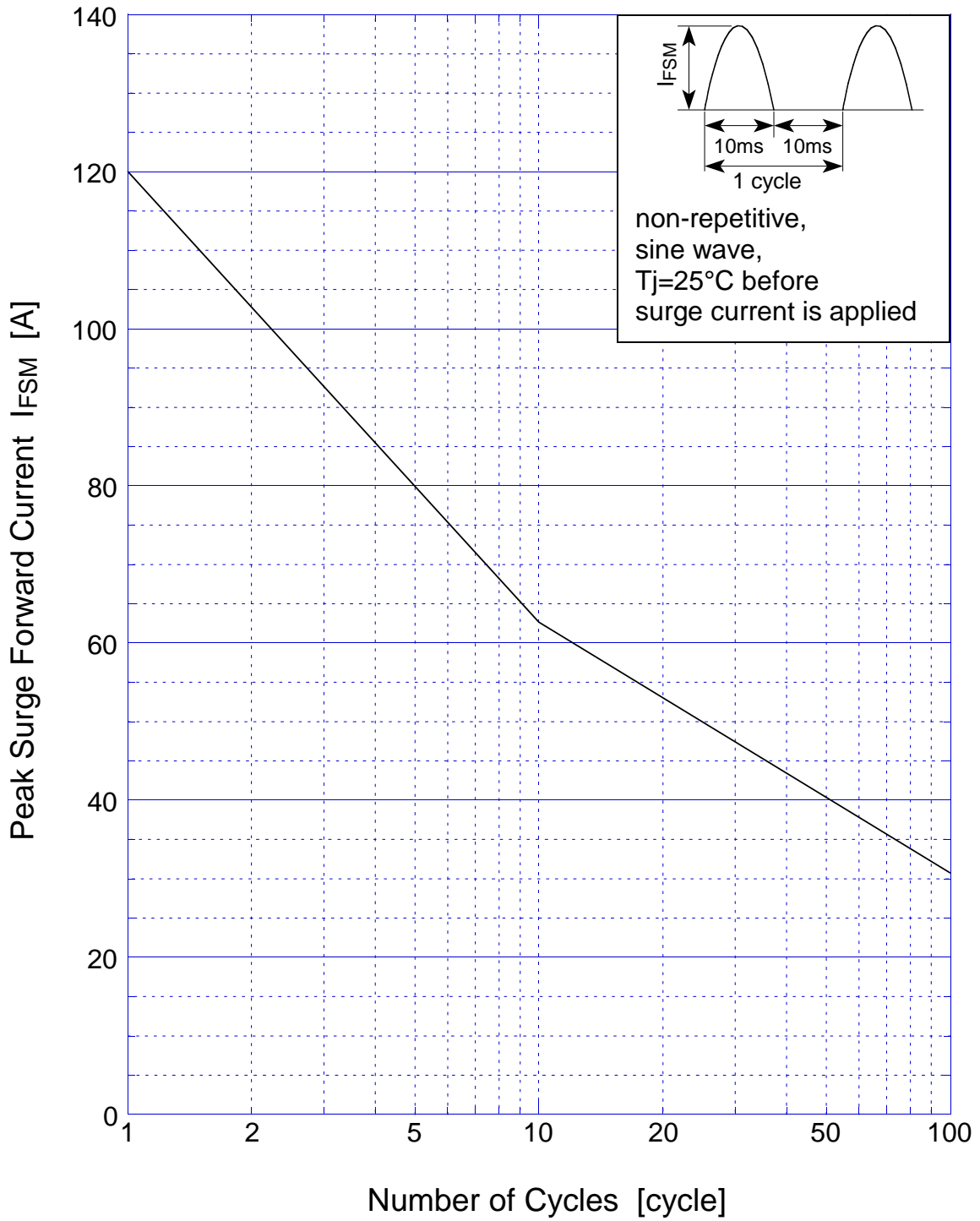


$T_j = 150^\circ\text{C}$



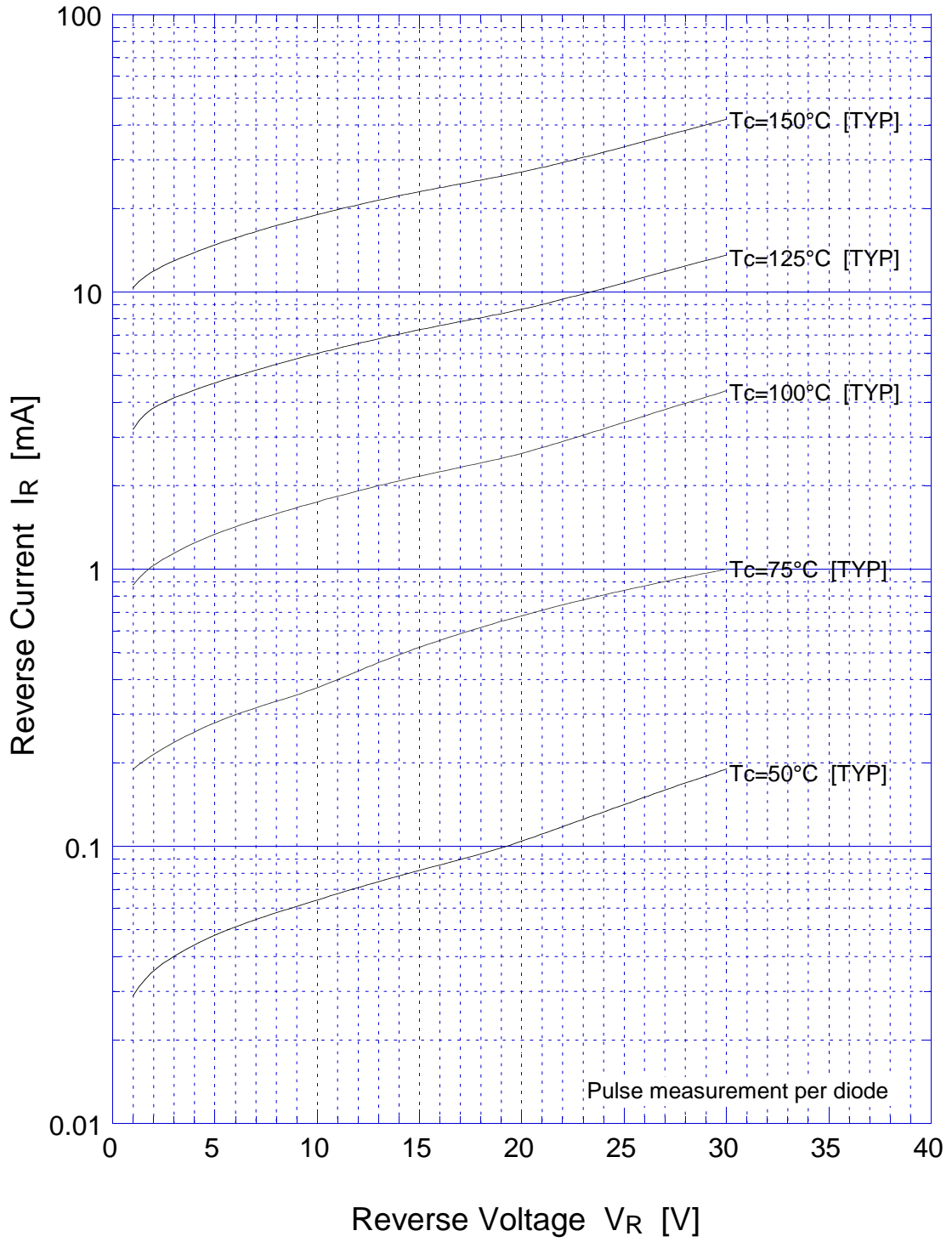
# M2FM3

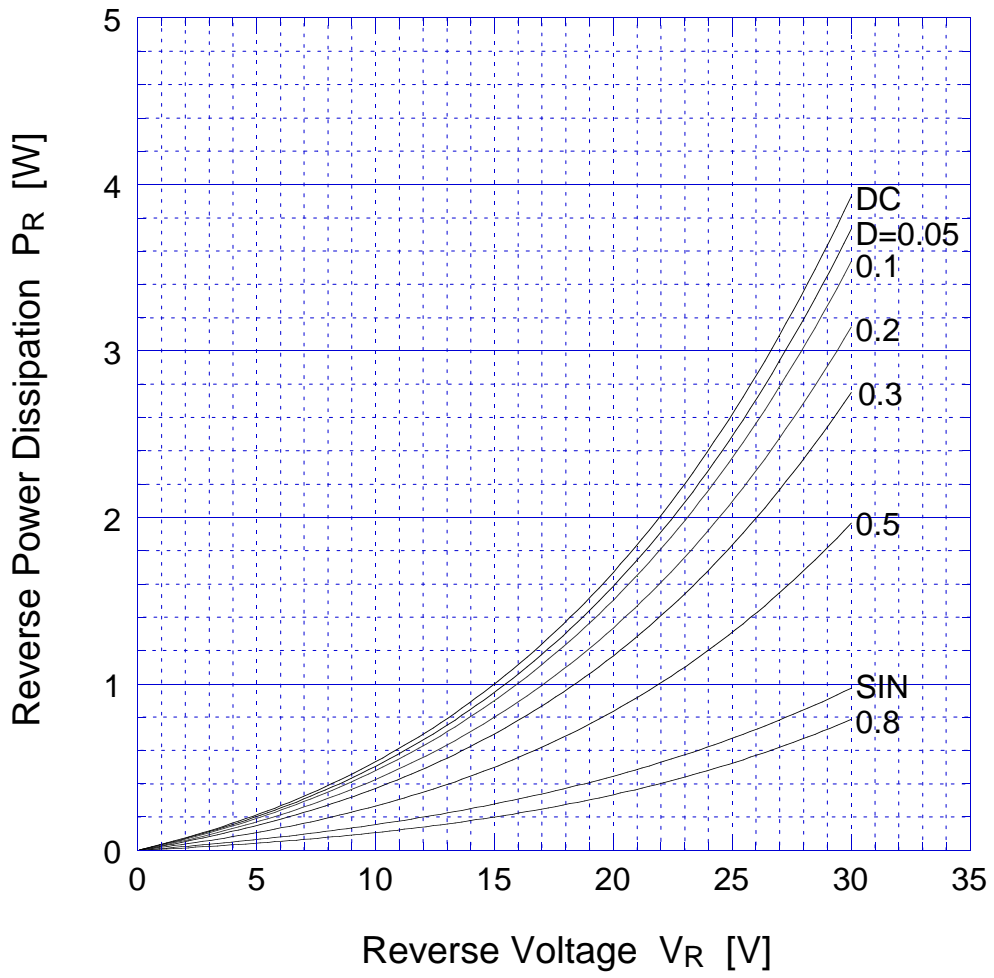
## Peak Surge Forward Capability



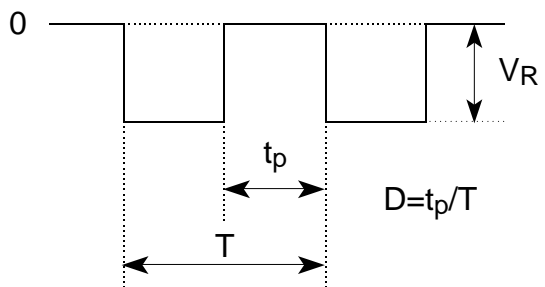
# M2FM3

# Reverse Current

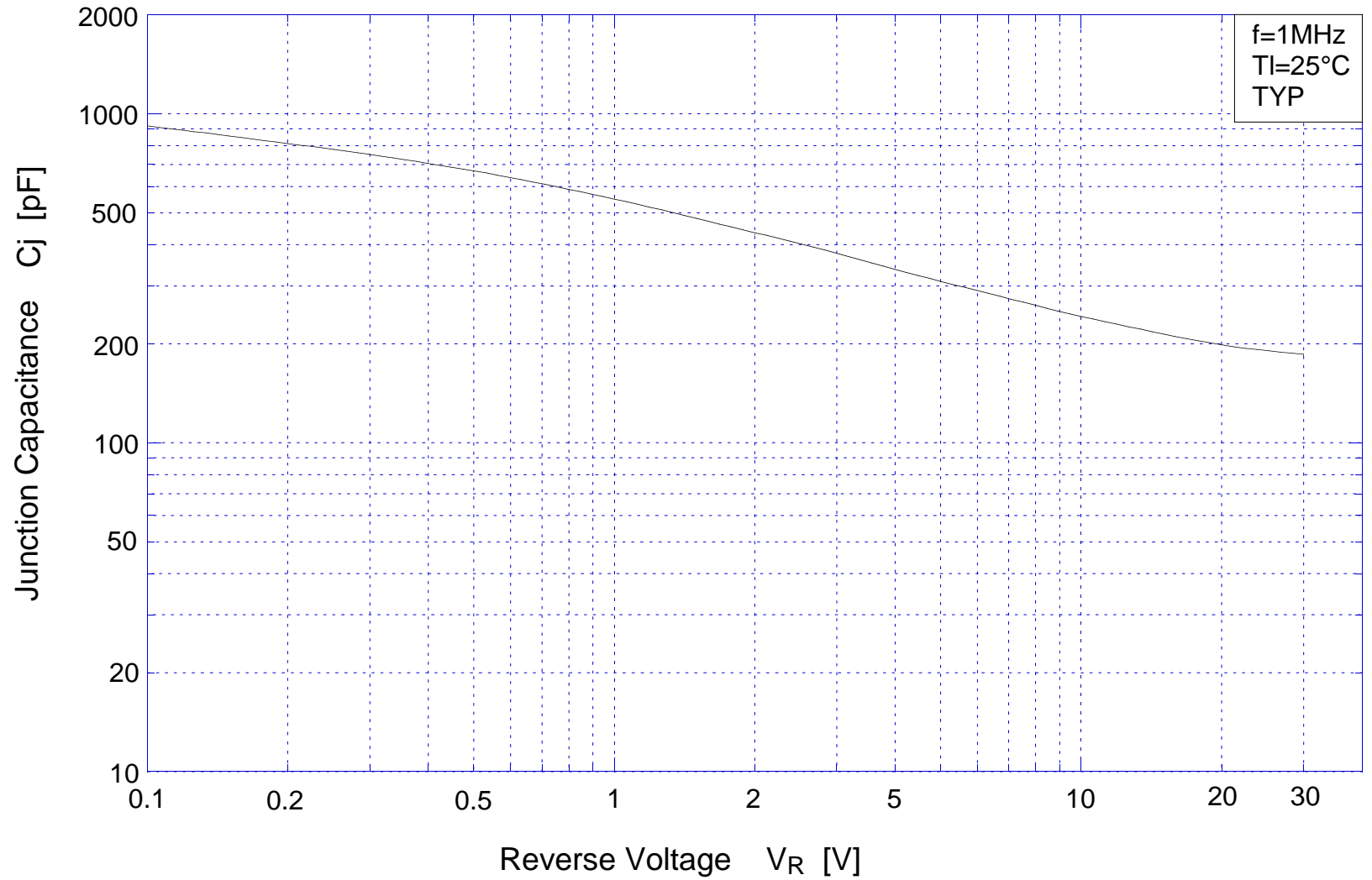




$T_j = 150^\circ\text{C}$

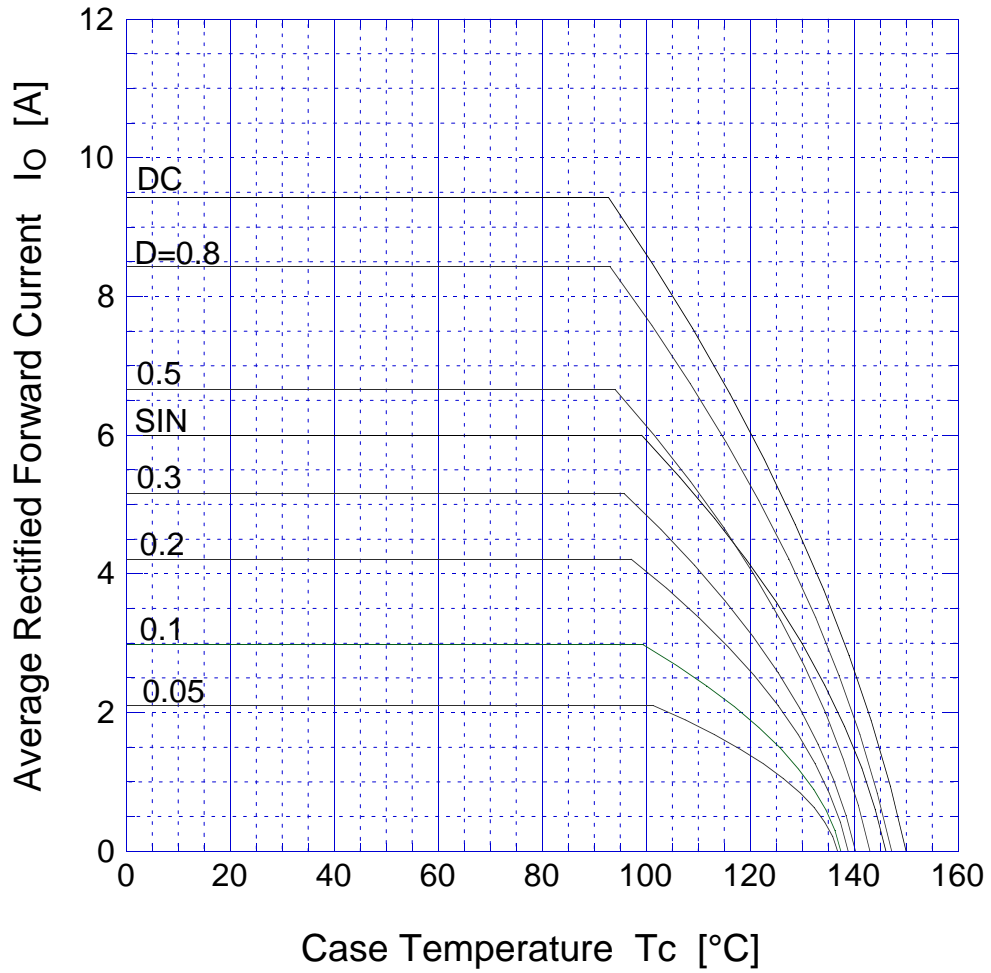


## M2FM3 Junction Capacitance

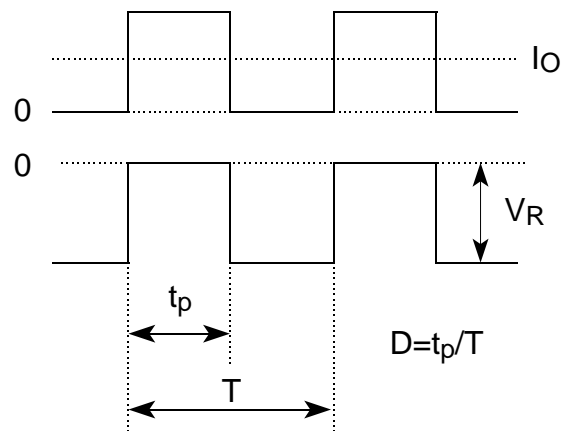


# M2FM3

# Derating Curve



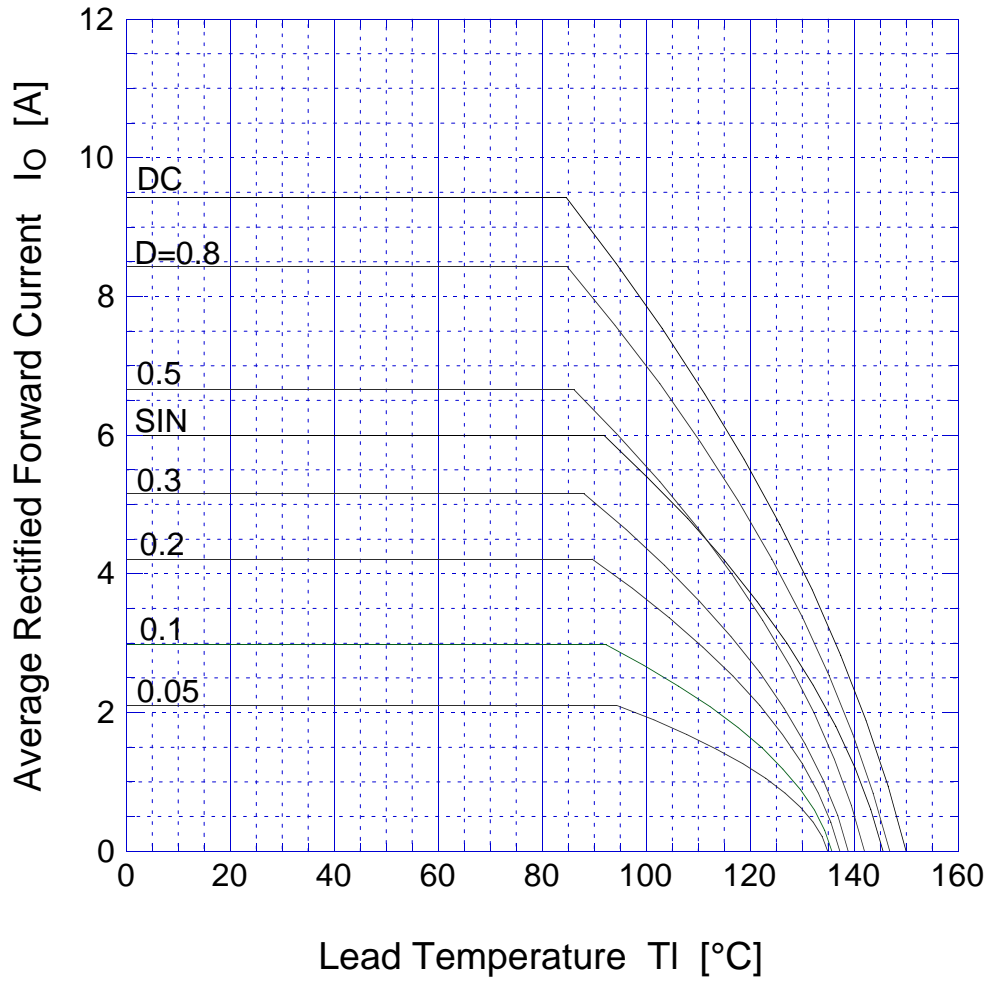
$V_R = 15V$



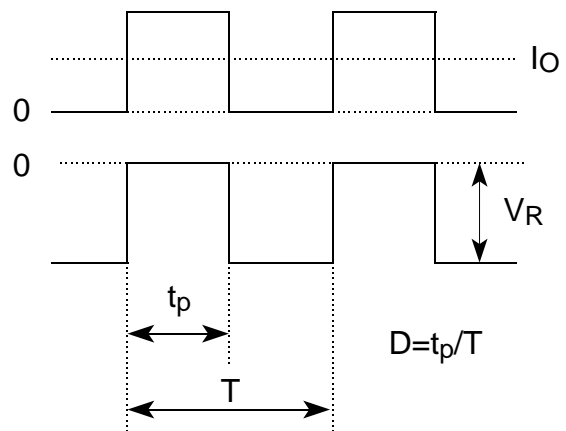


# M2FM3

# Derating Curve

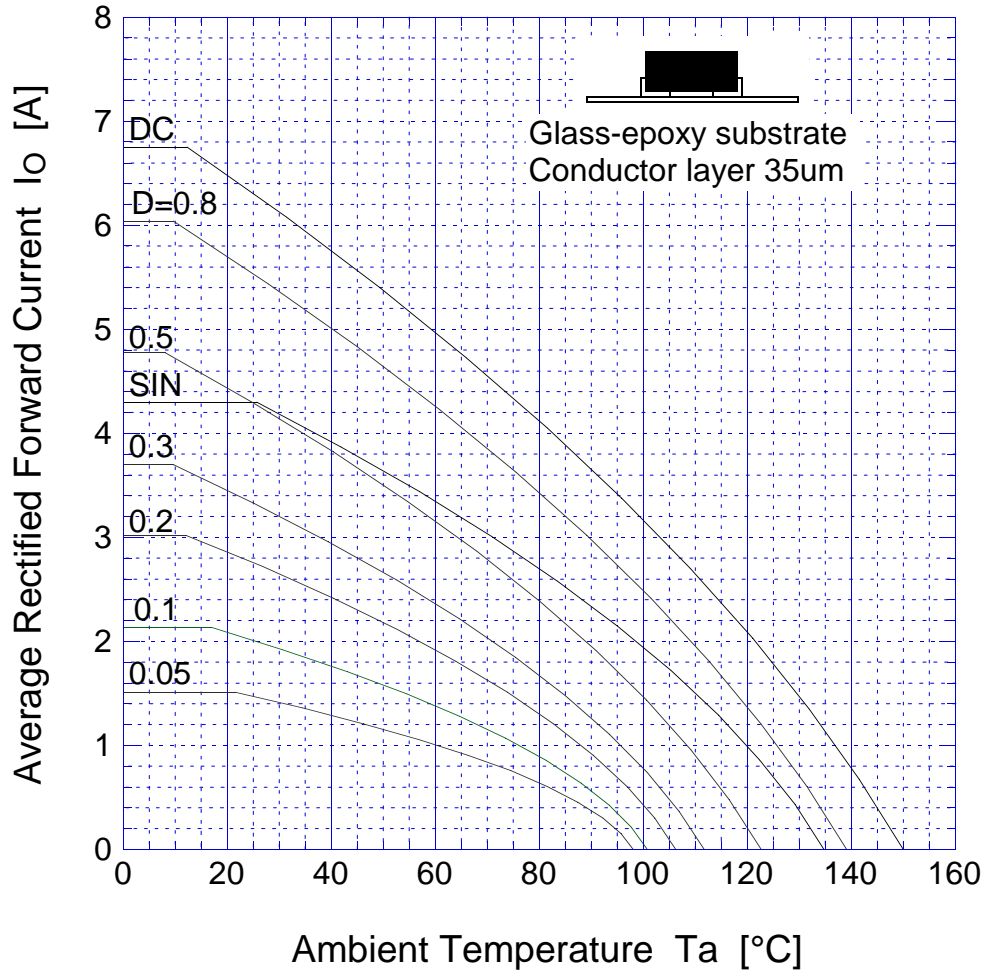


$V_R = 15V$

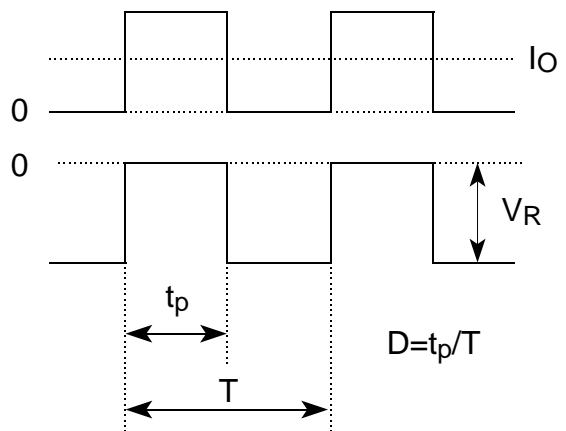


# M2FM3

# Derating Curve

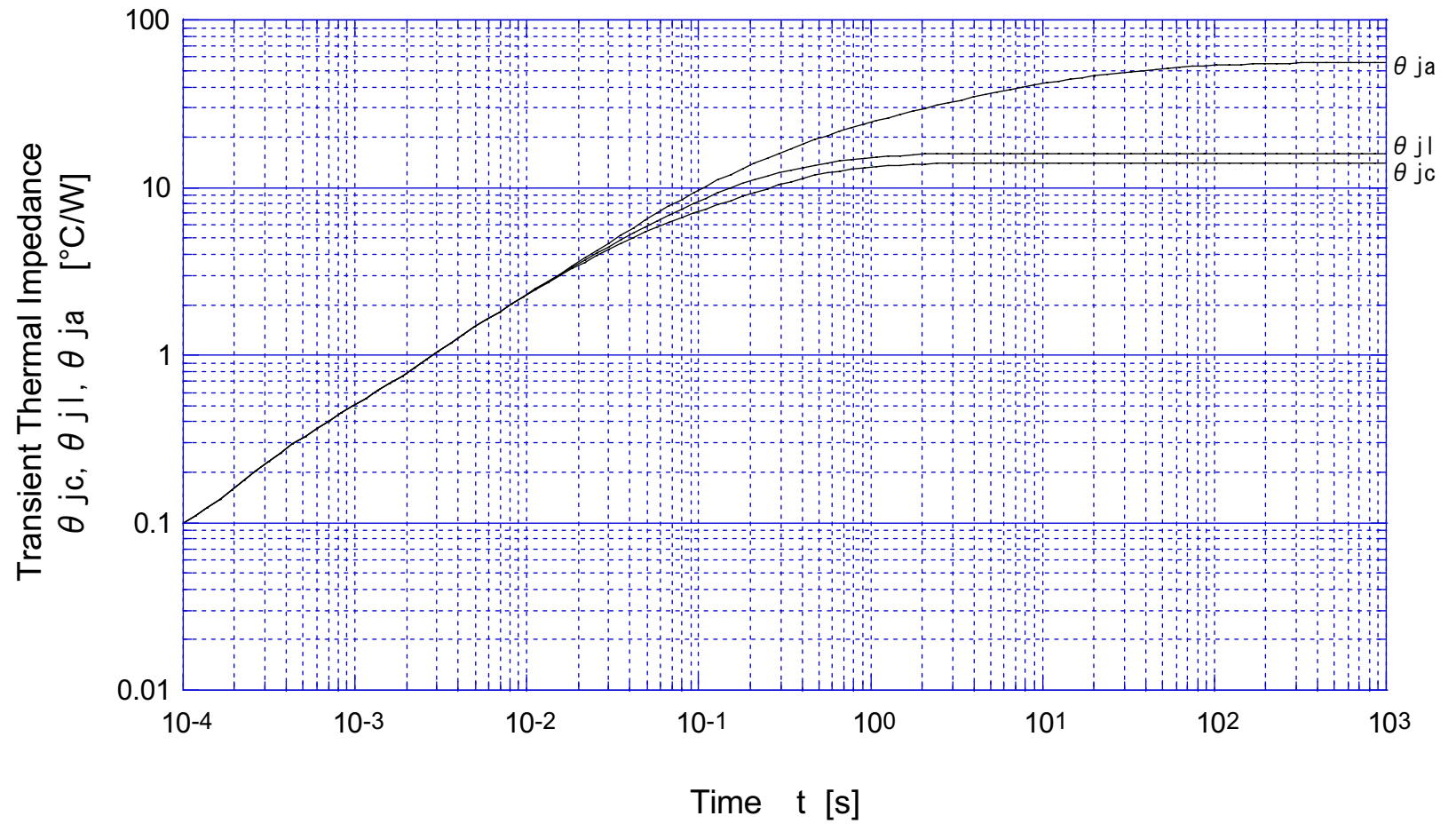


$V_R = 15V$



## M2FM3 Transient Thermal Impedance

---



M2FM3  $\theta_{ja}$  - Conductor pattern area

---

