

# SHINDENGEN

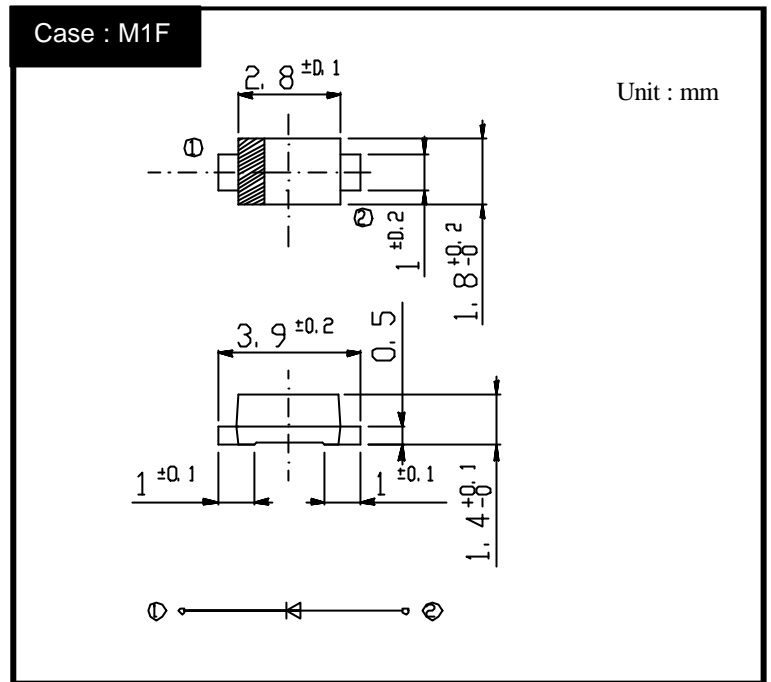
## General Purpose Rectifiers

Single

**M1FE40**

**400V 1A**

### OUTLINE DIMENSIONS



### RATINGS

Absolute Maximum Ratings (If not specified  $T_I=25$  )

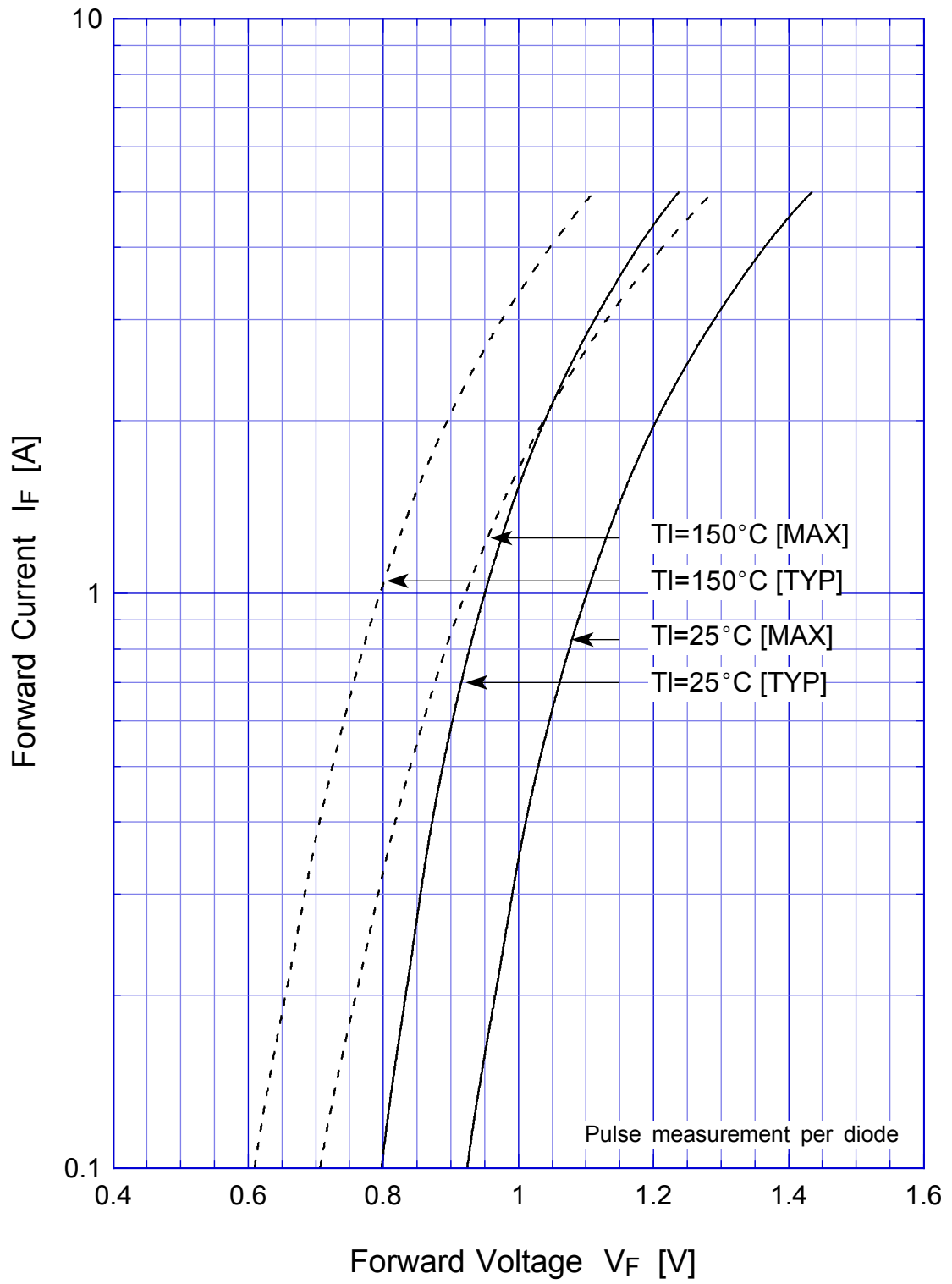
Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	$T_{stg}$		-55 ~ 150	
Operating Junction Temperature	$T_j$		150	
Maximum Reverse Voltage	$V_{RM}$		400	V
Average Rectified Forward Current	$I_o$	50Hz sine wave, R-load $T_a=25$ On glass-epoxy substrate	1.0	A
		50Hz sine wave, R-load $T_c=103$	2.0	
Peak Surge Forward Current	$I_{FSM}$	50Hz sine wave, Non-repetitive 1 cycle peak value, $T_j=25$	25	A

Electrical Characteristics (If not specified  $T_I=25$  )

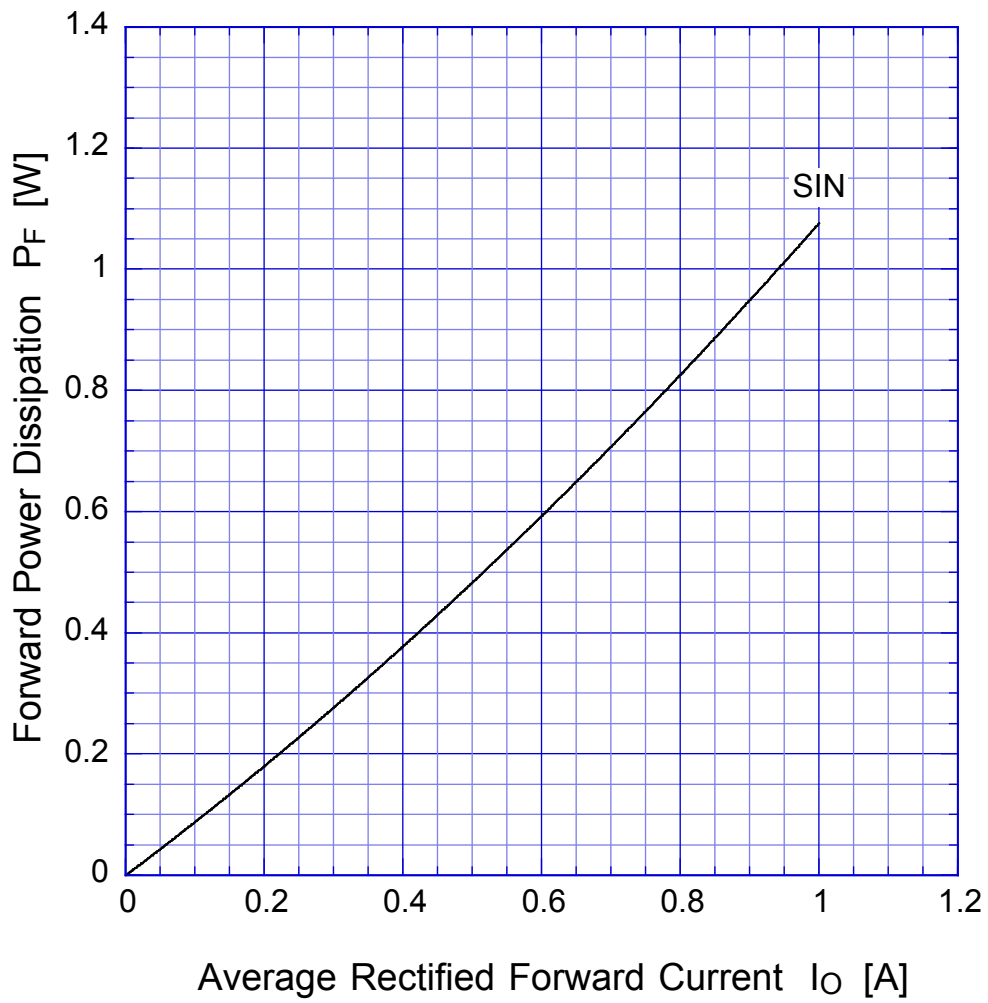
Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	$V_F$	$I_F=1A$ , Pulse measurement	Max.1.1	V
Reverse Current	$I_R$	$V_R=V_{RM}$ , Pulse measurement	Max.10	$\mu A$
Thermal Resistance	$j_l$	junction to lead	Max.20	/W
	$j_a$	junction to ambient, On glass-epoxy substrate	Max.80	
	$j_c$	junction to case	Max.18	

# M1FE40

## Forward Voltage



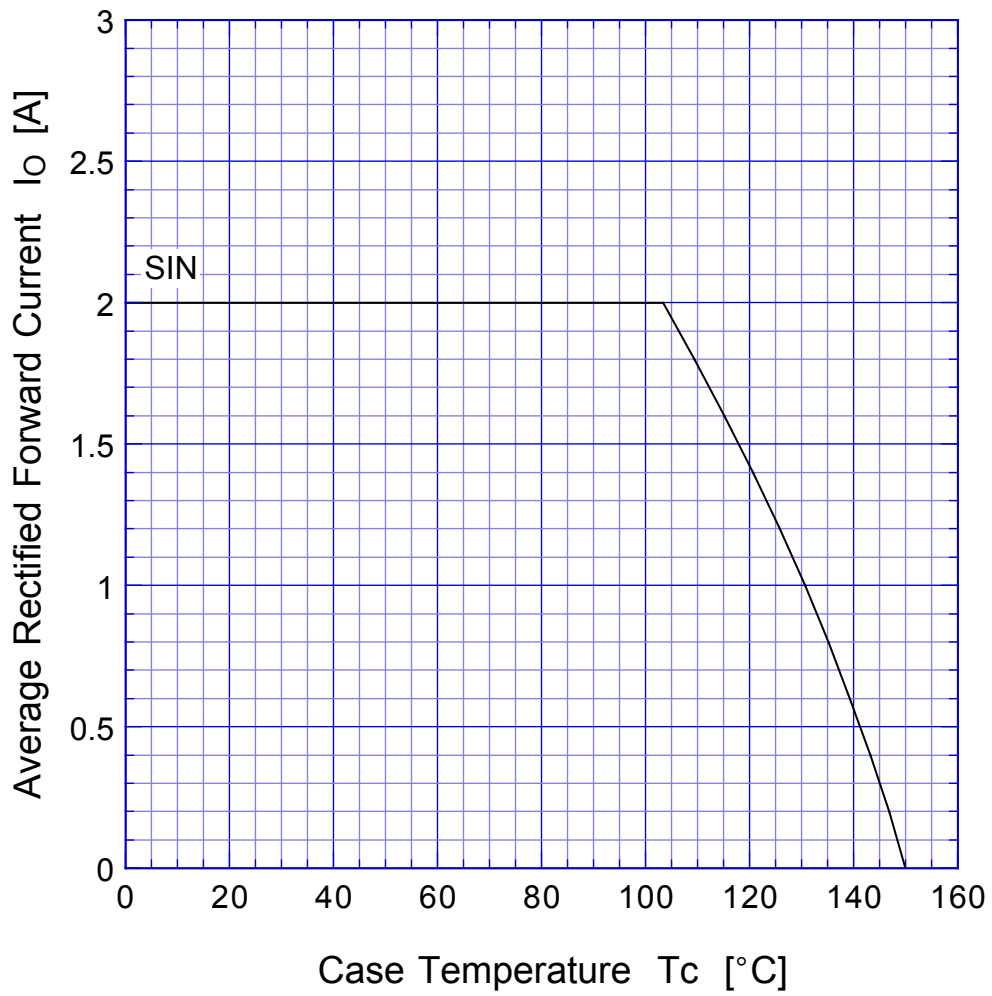
# M1FE40 Forward Power Dissipation



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

# M1FE40

# Derating Curve

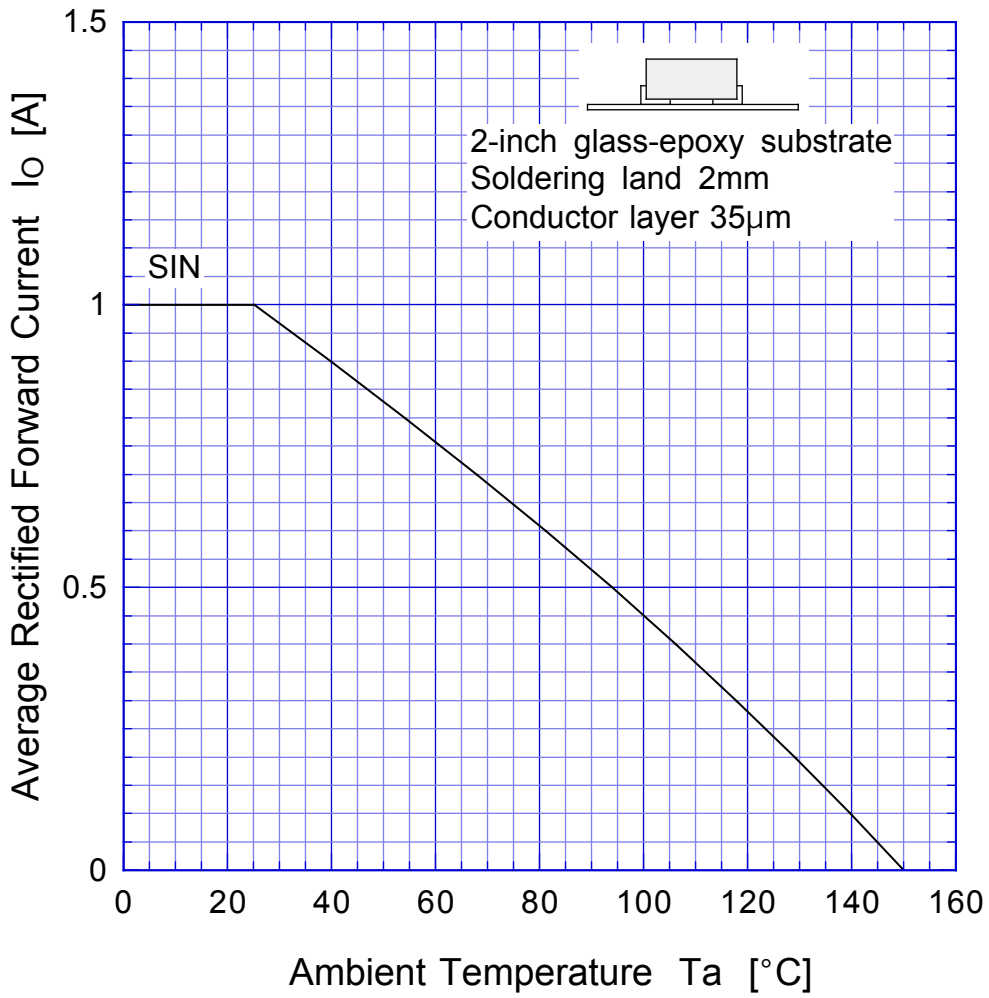


$$V_R = V_{RM}$$



# M1FE40

# Derating Curve

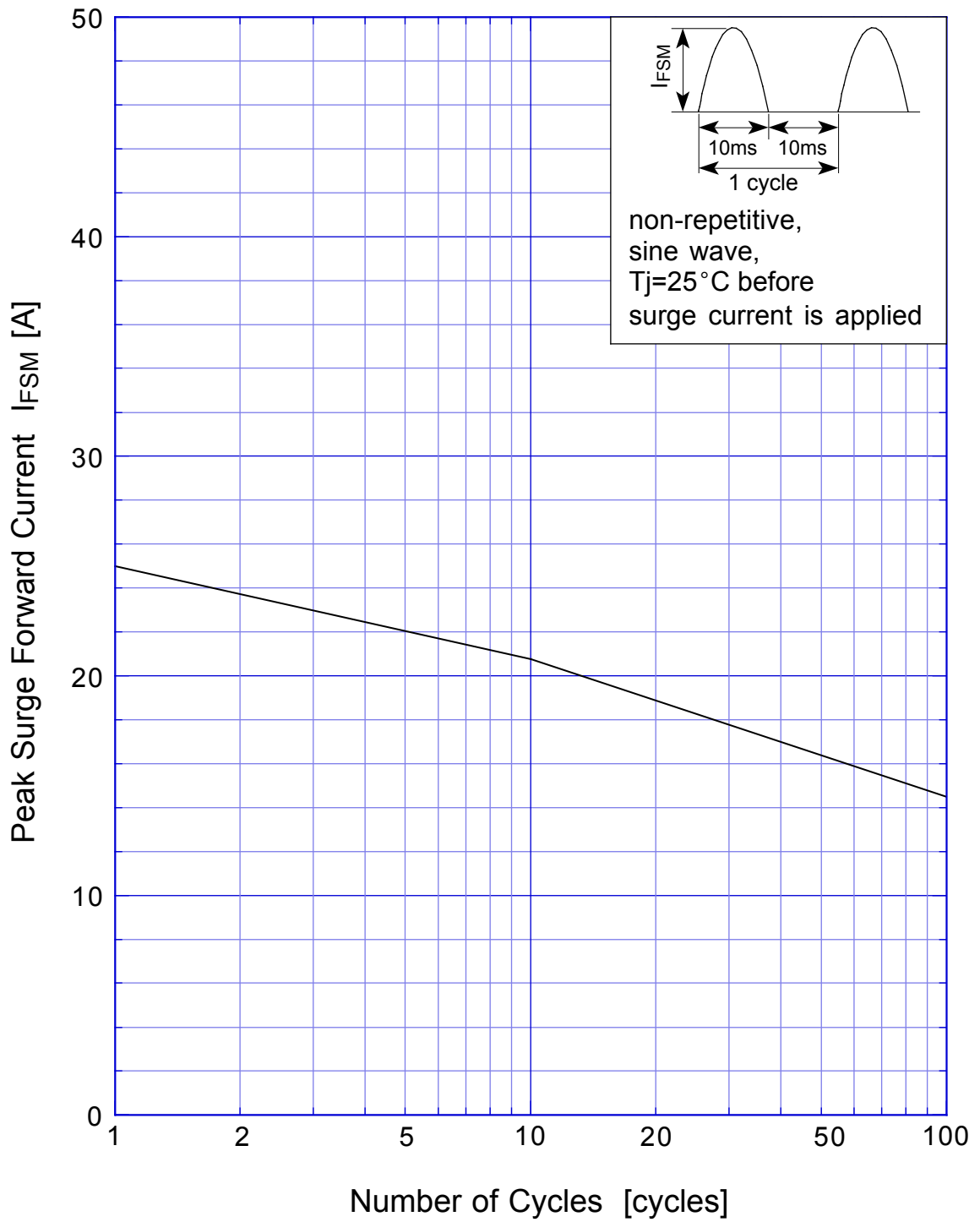


$$V_R = V_{RM}$$

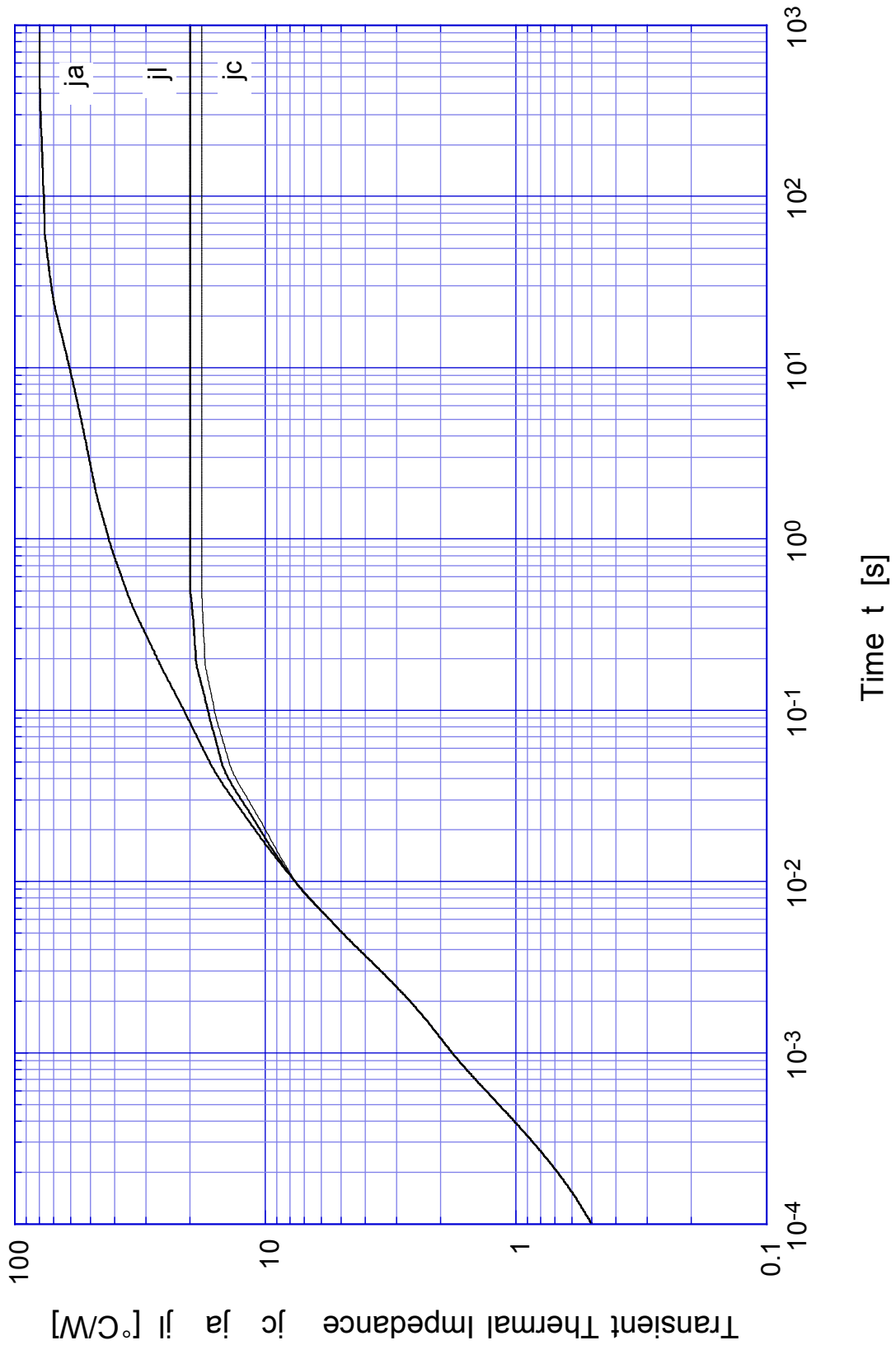


# M1FE40

## Peak Surge Forward Capability



# M1FE40 Transient Thermal Impedance



M1FE40 ja - Conductor Pattern Area

