

SHINDENGEN

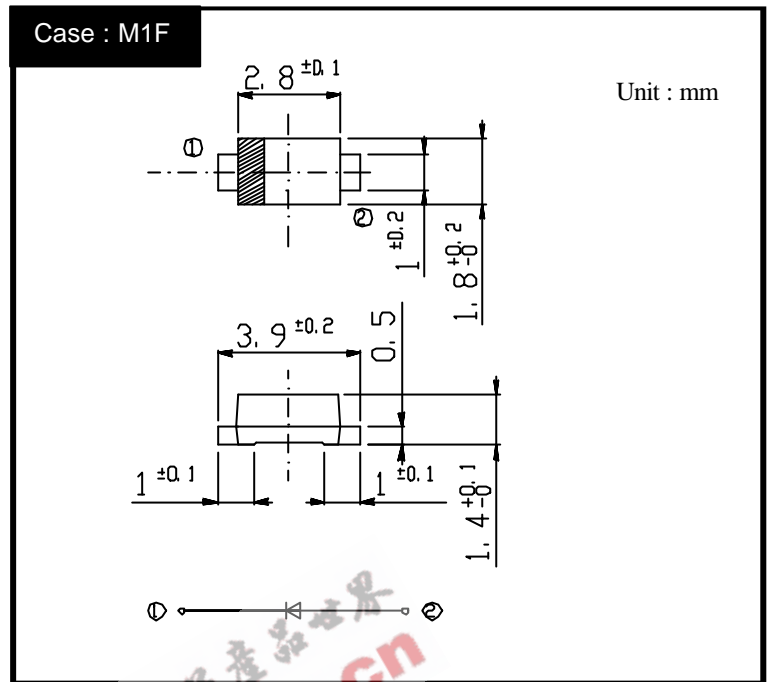
General Purpose Rectifiers

Single

M1FE40

400V 1A

OUTLINE DIMENSIONS



RATINGS

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

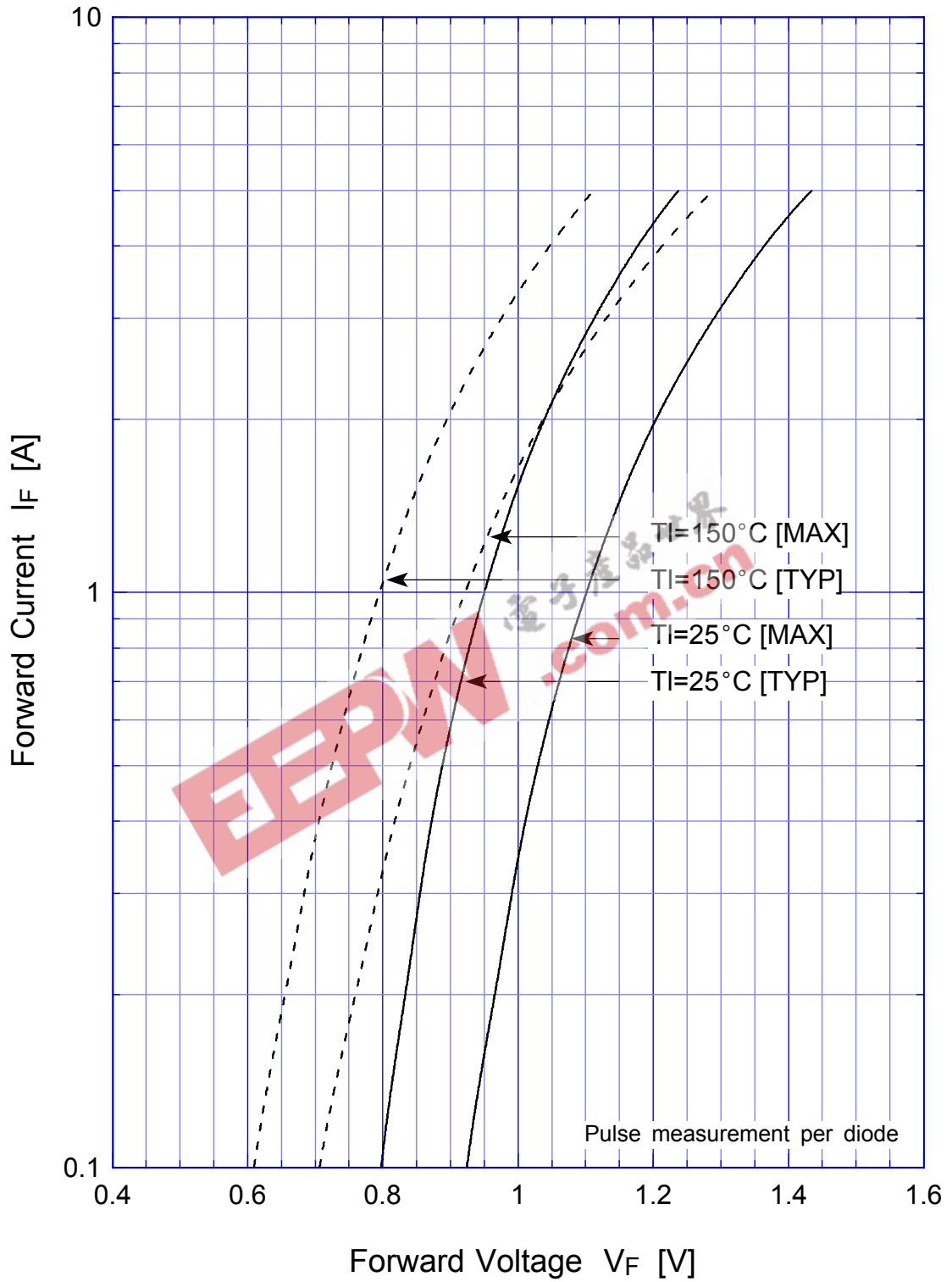
Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	T_{stg}		-55 ~ 150	
Operating Junction Temperature	T_j		150	
Maximum Reverse Voltage	V_{RM}		400	V
Average Rectified Forward Current	I_O	50Hz sine wave, R-load $T_a=25$ On glass-epoxy substrate	1.0	A
		50Hz sine wave, R-load $T_c=103$	2.0	
Peak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

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

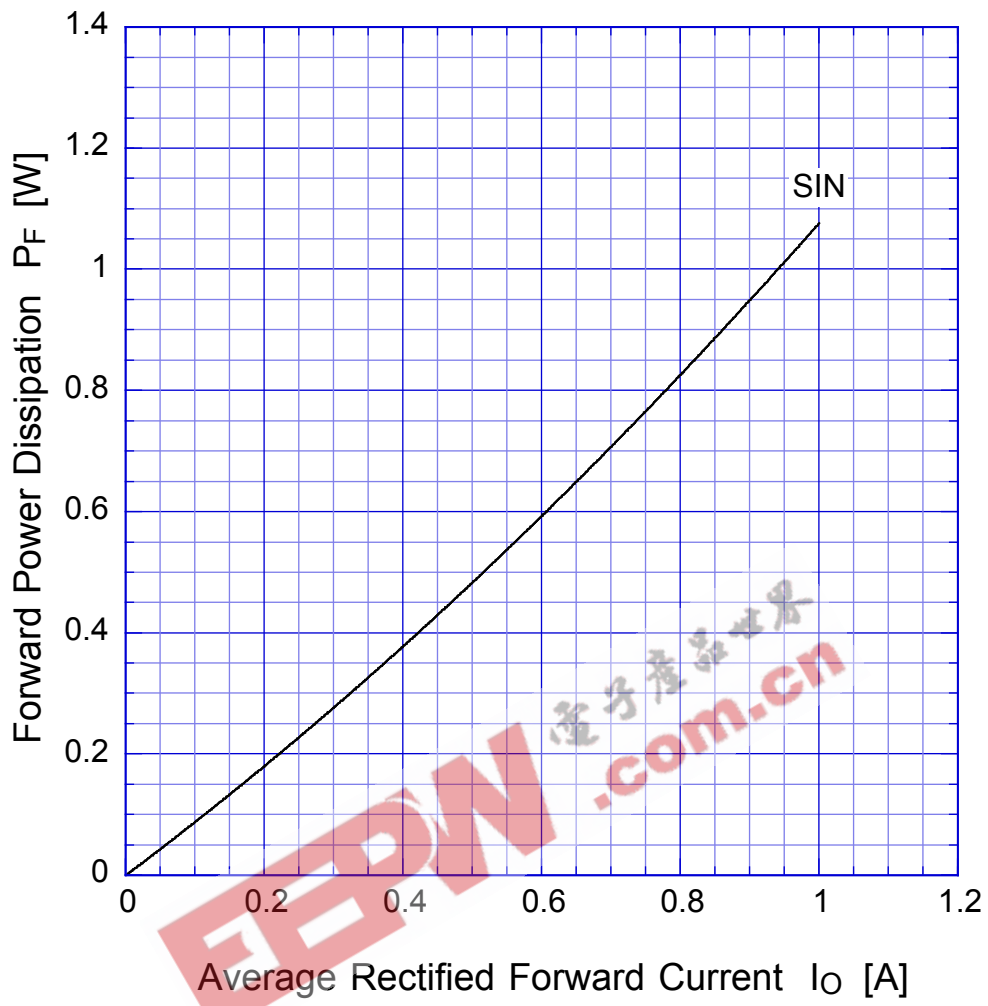
Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	V_F	$I_F=1A$, Pulse measurement	Max.1.1	V
Reverse Current	I_R	$V_R=V_{RM}$, Pulse measurement	Max.10	μA
Thermal Resistance	j_l	junction to lead	Max.20	/W
	j_a	junction to ambient, On glass-epoxy substrate	Max.80	
	j_c	junction to case	Max.18	

M1FE40

Forward Voltage



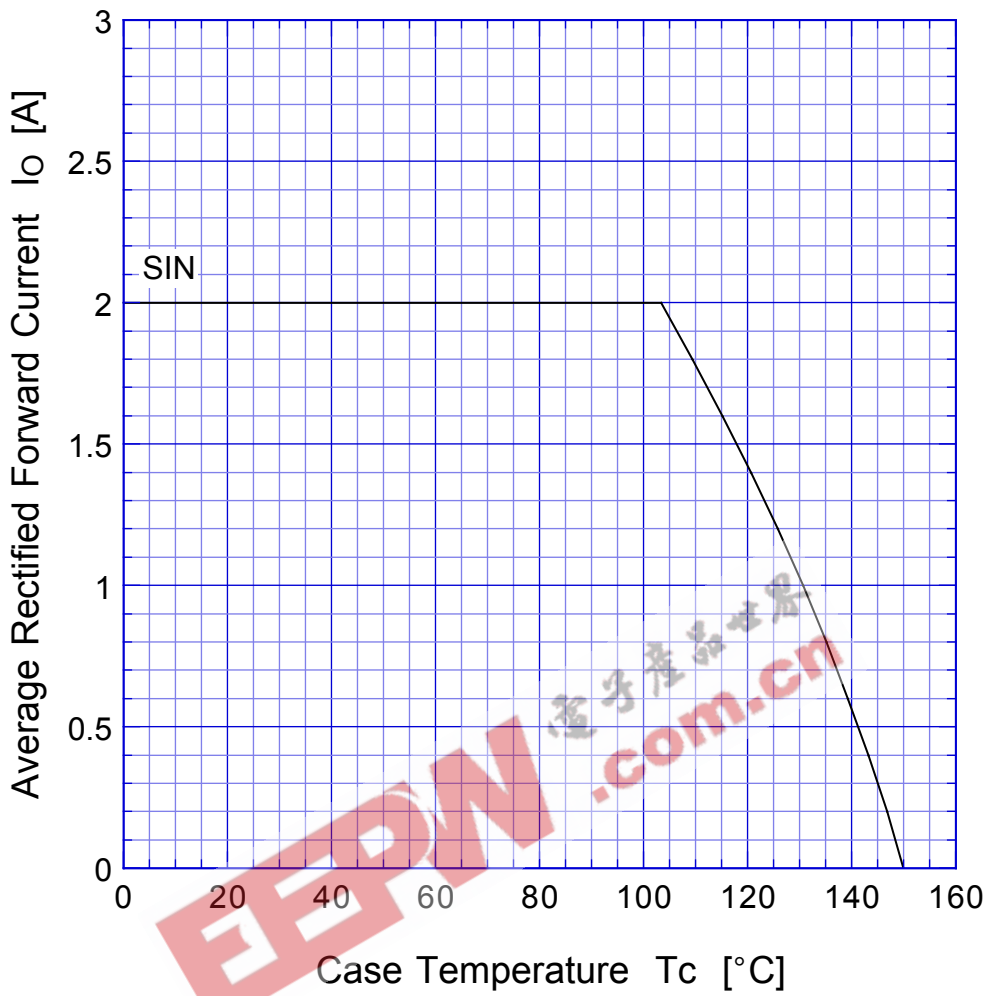
M1FE40 Forward Power Dissipation



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

M1FE40

Derating Curve

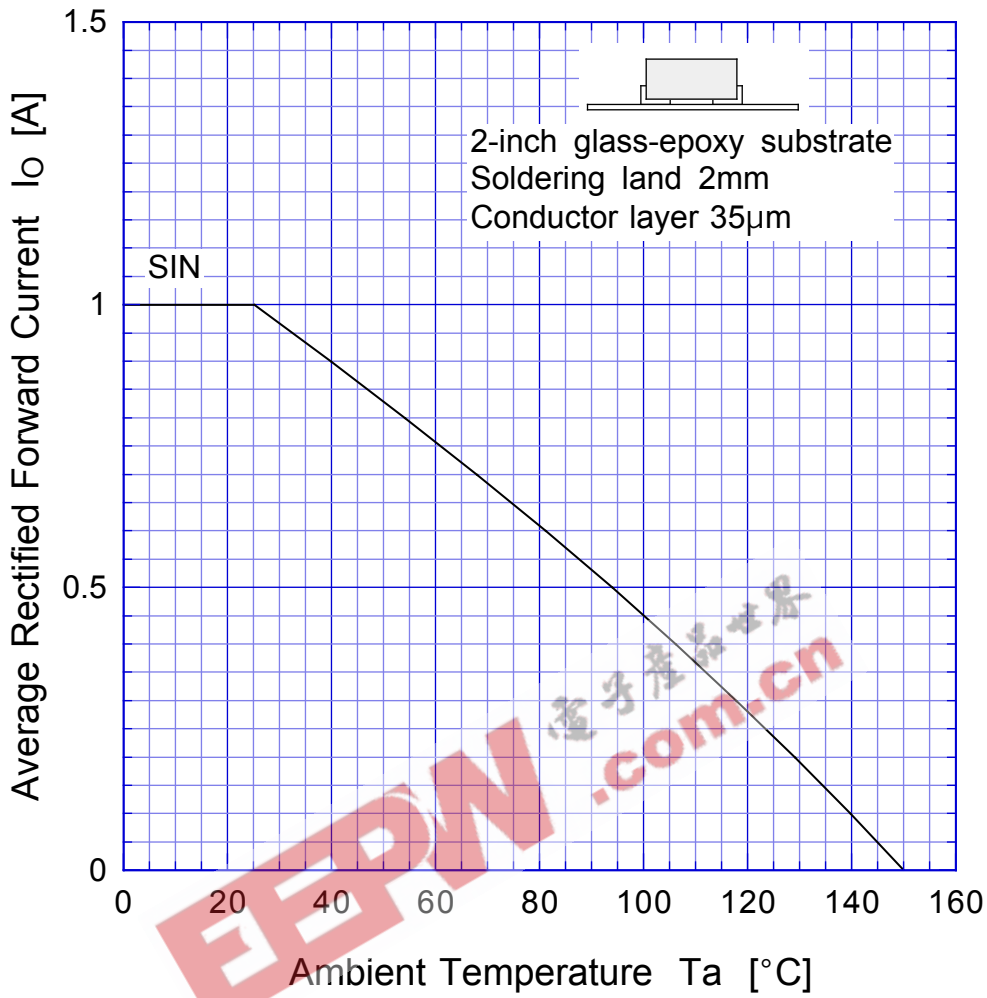


$$V_R = V_{RM}$$

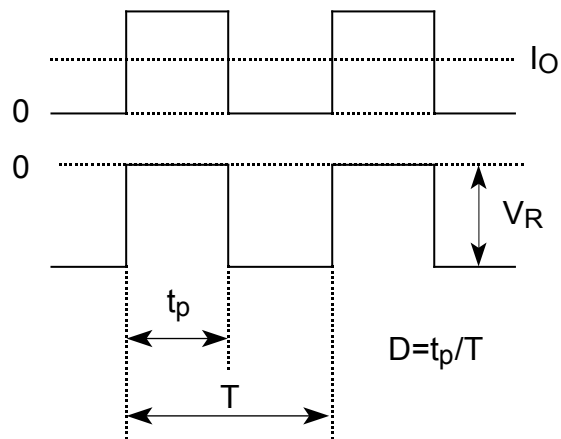


M1FE40

Derating Curve

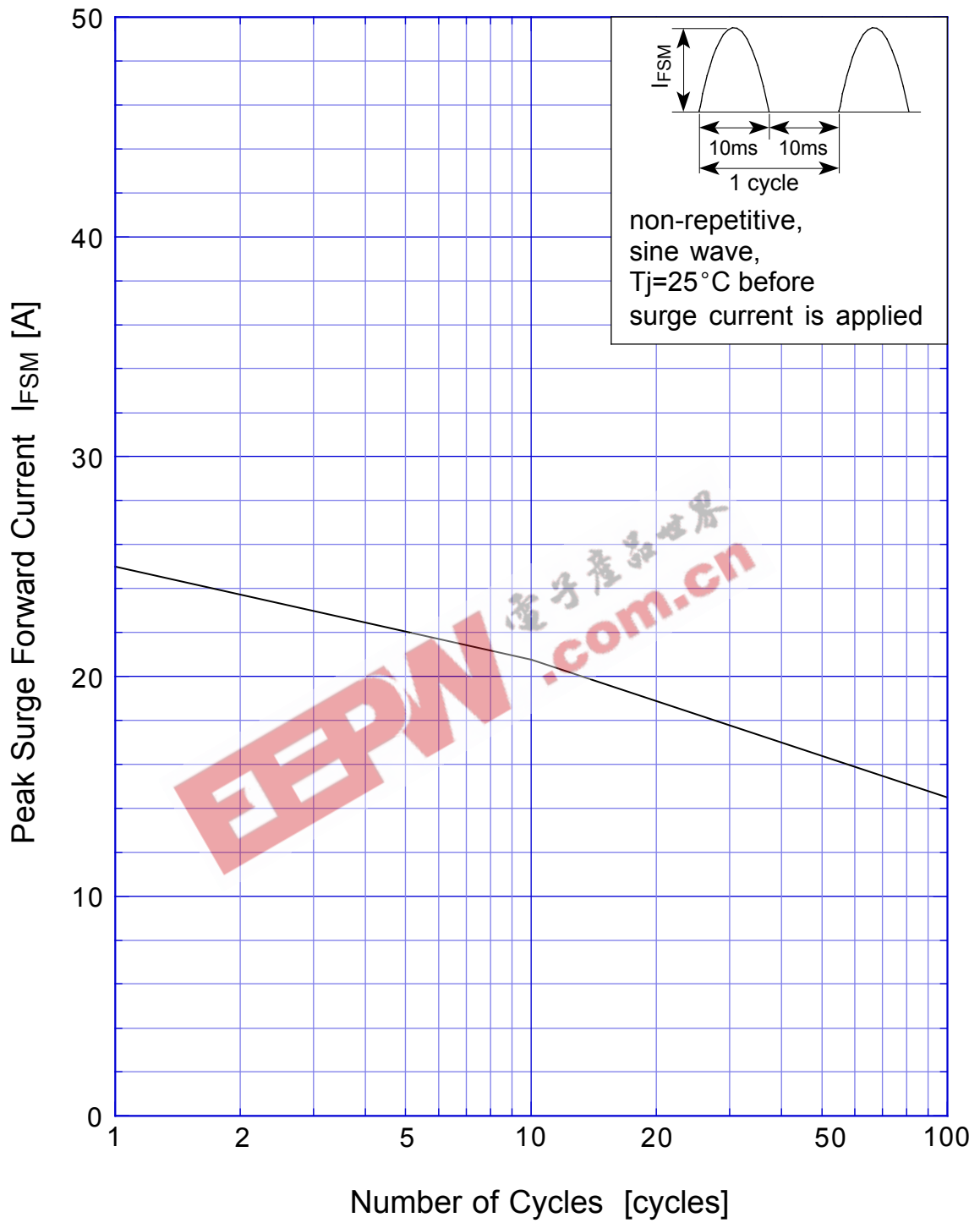


$$V_R = V_{RM}$$

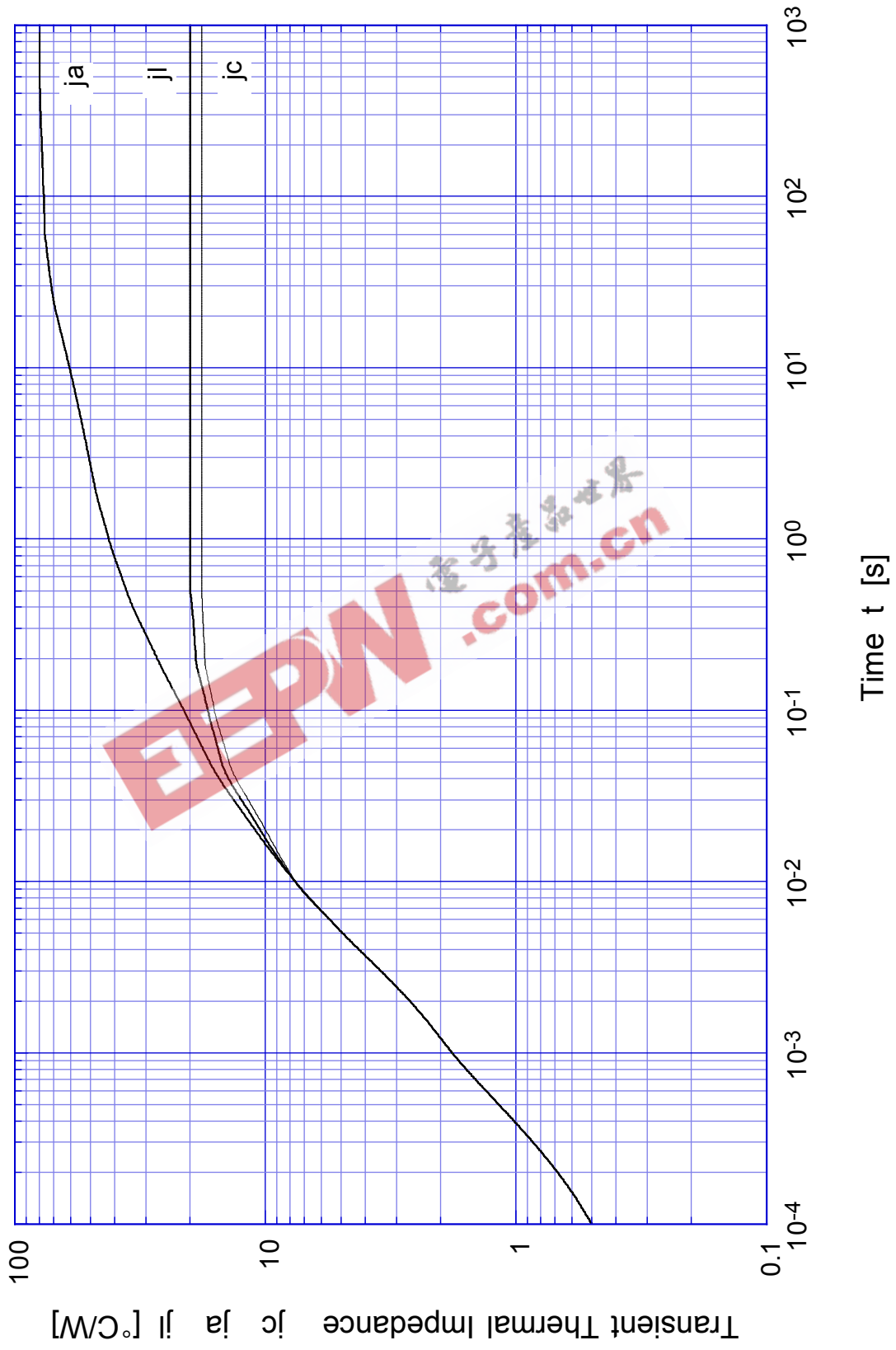


M1FE40

Peak Surge Forward Capability



M1FE40 Transient Thermal Impedance



M1FE40 ja - Conductor Pattern Area

