

SHINDENGEN

General Purpose Rectifiers

Single

M1F80

800V 1A

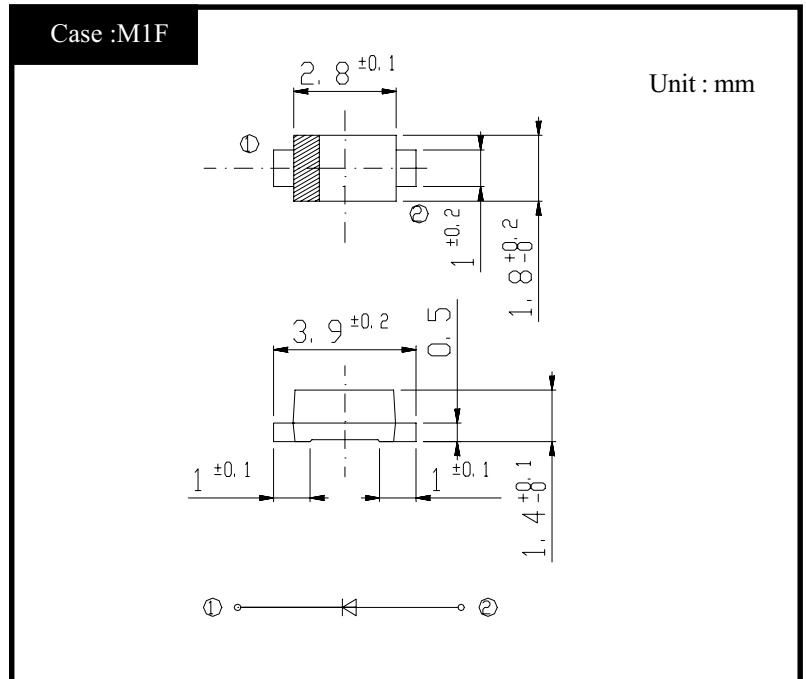
FEATURES

- High reliability with superior moisture resistance
- Applicable to Automatic Insertion

APPLICATION

- Conventional Rectification
- Power source (Power Supply)
- Home Appliances, Office Equipment
- Telecommunication, Factory Automation

OUTLINE DIMENSIONS



RATINGS

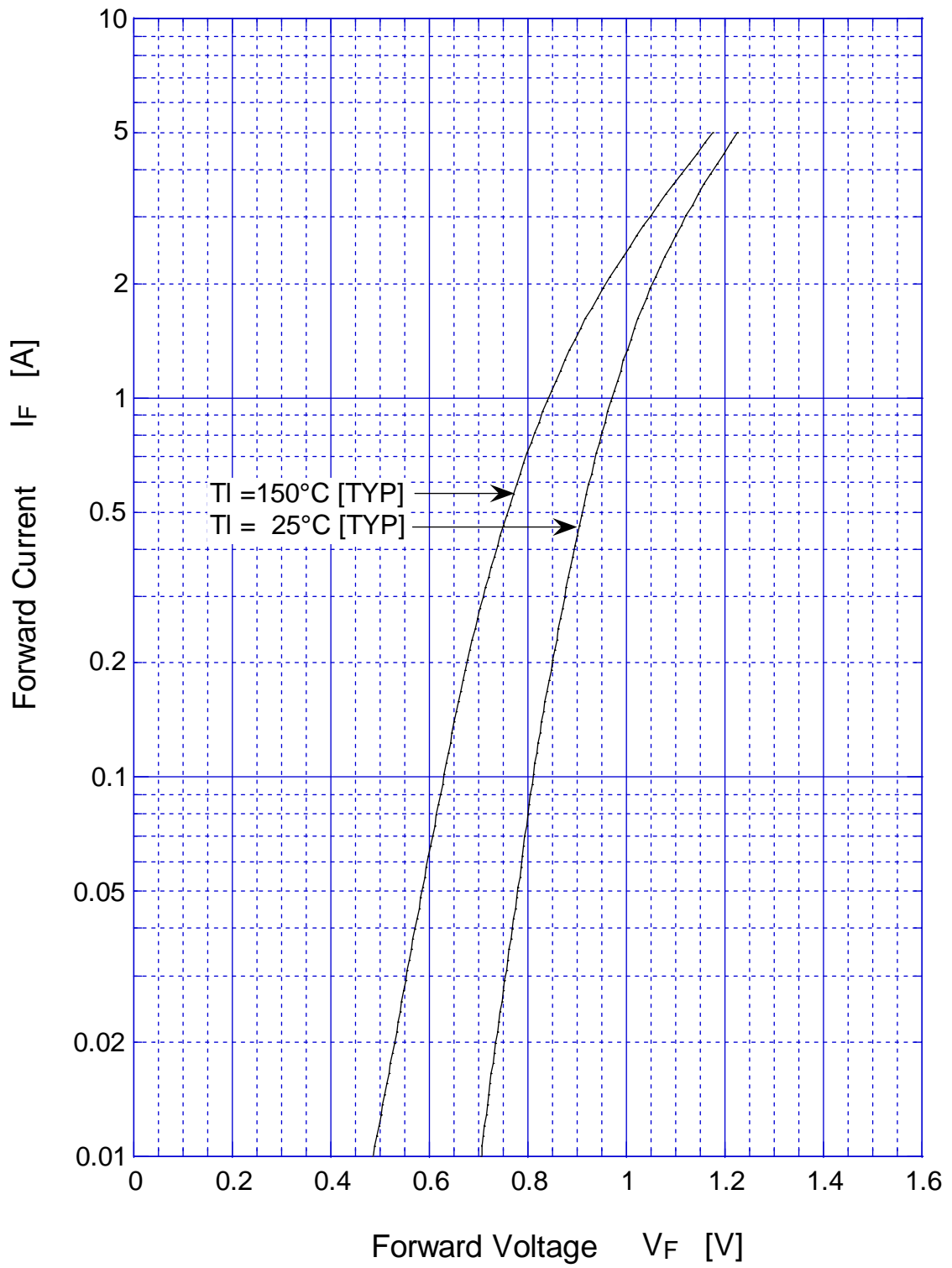
● Absolute Maximum Ratings (If not specified $T_I=25^\circ\text{C}$)

Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	T_{stg}		-55~150	$^\circ\text{C}$
Operating Junction Temperature	T_j		150	$^\circ\text{C}$
Maximum Reverse Voltage	V_{RM}		800	V
Average Rectified Forward Current	I_O	50Hz sine wave, R-load, $T_a=25^\circ\text{C}$ On alumina substrate	1.0	A
		50Hz sine wave, R-load, $T_a=25^\circ\text{C}$ On glass-epoxy substrate	0.64	
Peak Surge Forward Current	I_{FSM}	50Hz sine wave, Non-repetitive 1 cycle peak value, $T_j=25^\circ\text{C}$	25	A

● Electrical Characteristics (If not specified $T_I=25^\circ\text{C}$)

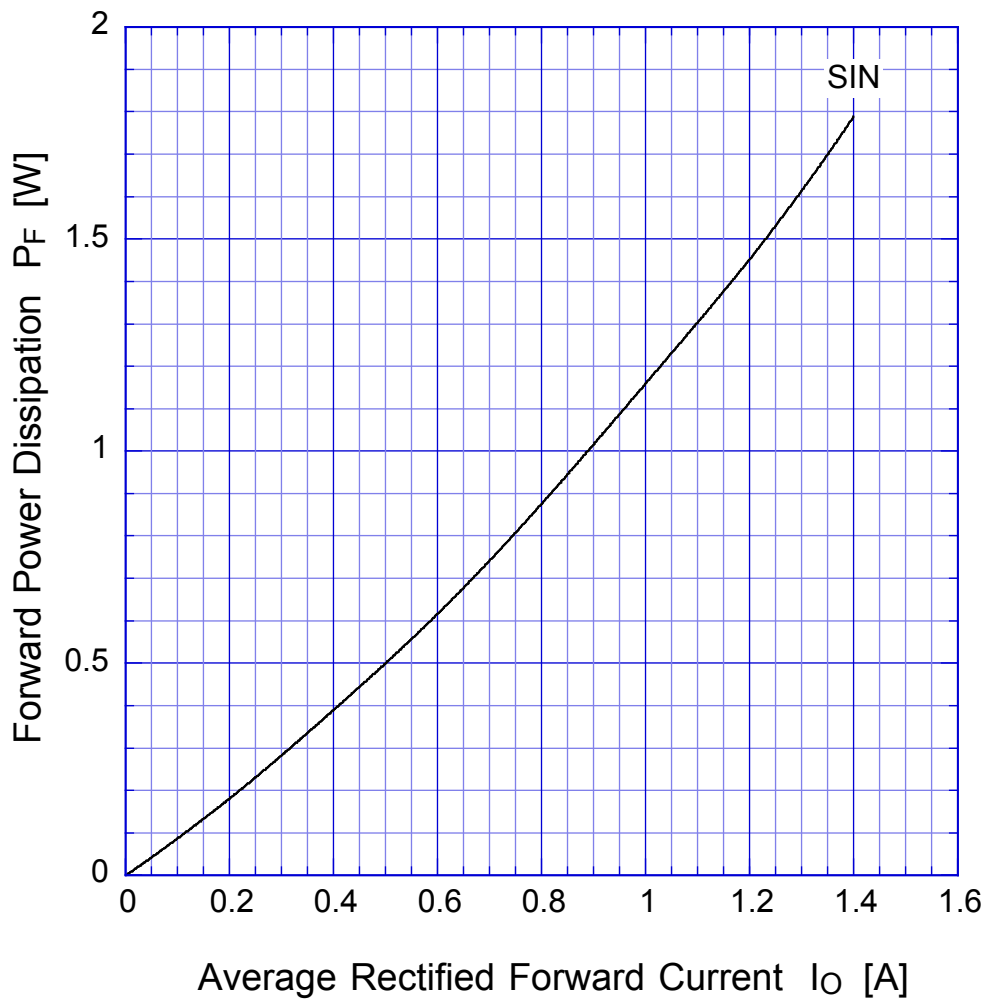
Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	V_F	$I_F=1\text{A}$, Pulse measurement	Max.1.1	V
Reverse Current	I_R	$V_R=V_{RM}$, Pulse measurement	Max.10	μA
Thermal Resistance	θ_{jl}	junction to lead	Max.20	$^\circ\text{C}/\text{W}$
	θ_{ja}	junction to ambient, On alumina substrate	Max.108	
		junction to ambient, On glass-epoxy substrate	Max.186	

M1F x Forward Voltage



M1Fx

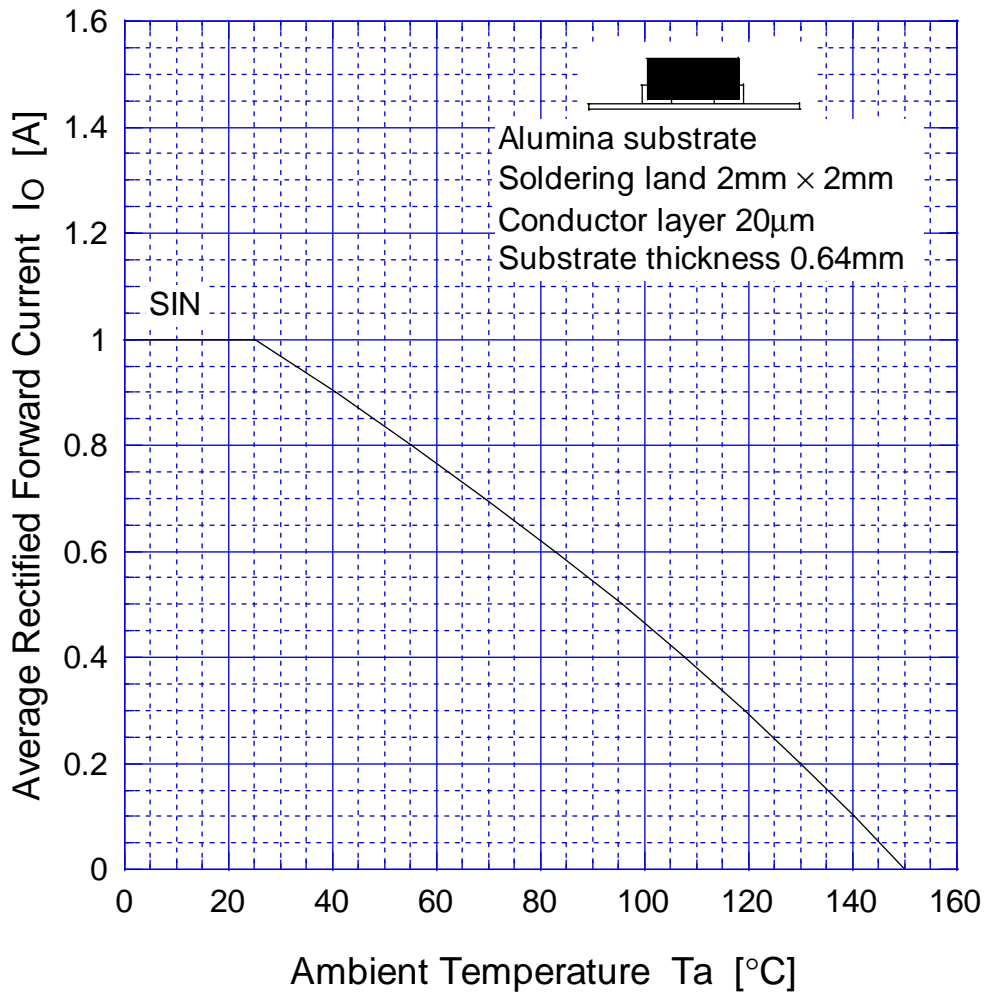
Forward Power Dissipation



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

M1Fx

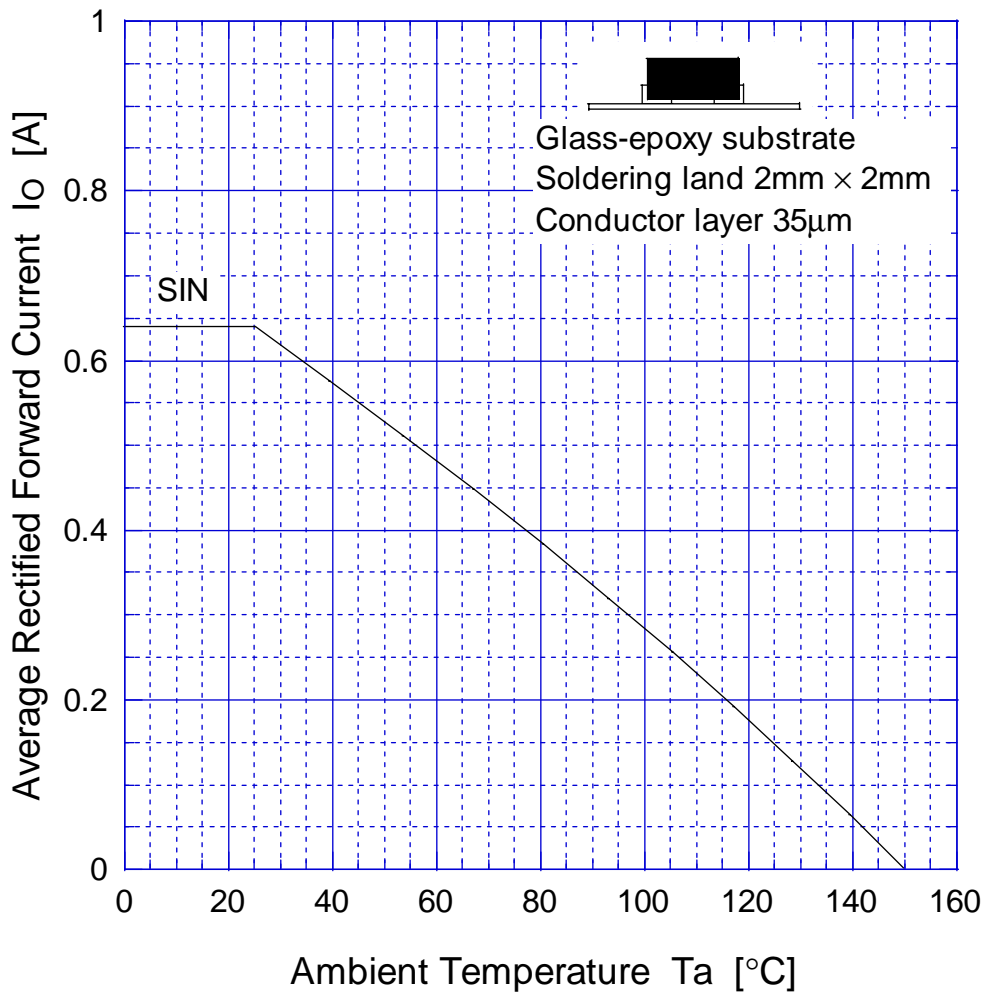
Derating Curve



Sine wave
R-load
Free in air

M1Fx

Derating Curve



Sine wave
R-load
Free in air

M1Fx

Peak Surge Forward Capability

