

SHINDENGEN

Super Fast Recovery Rectifiers

Single

M1FL20U**200V 1.1A**

FEATURES

- Small SMT
- Low noise
- trr35ns

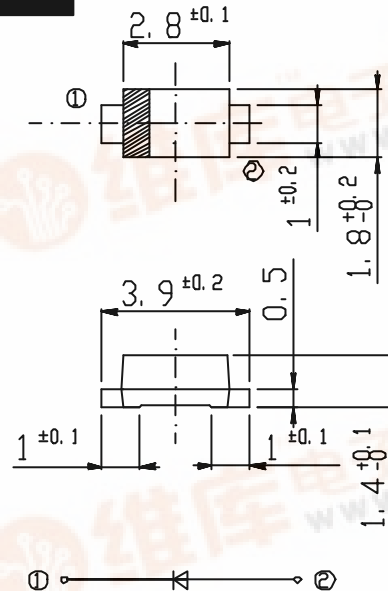
APPLICATION

- Switching power supply
- DC/DC converter
- Free Wheel
- Home Appliances, Office Equipment
- Telecommunication, Factory Automation

OUTLINE DIMENSIONS

Case : M1F

Unit : mm



RATINGS

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

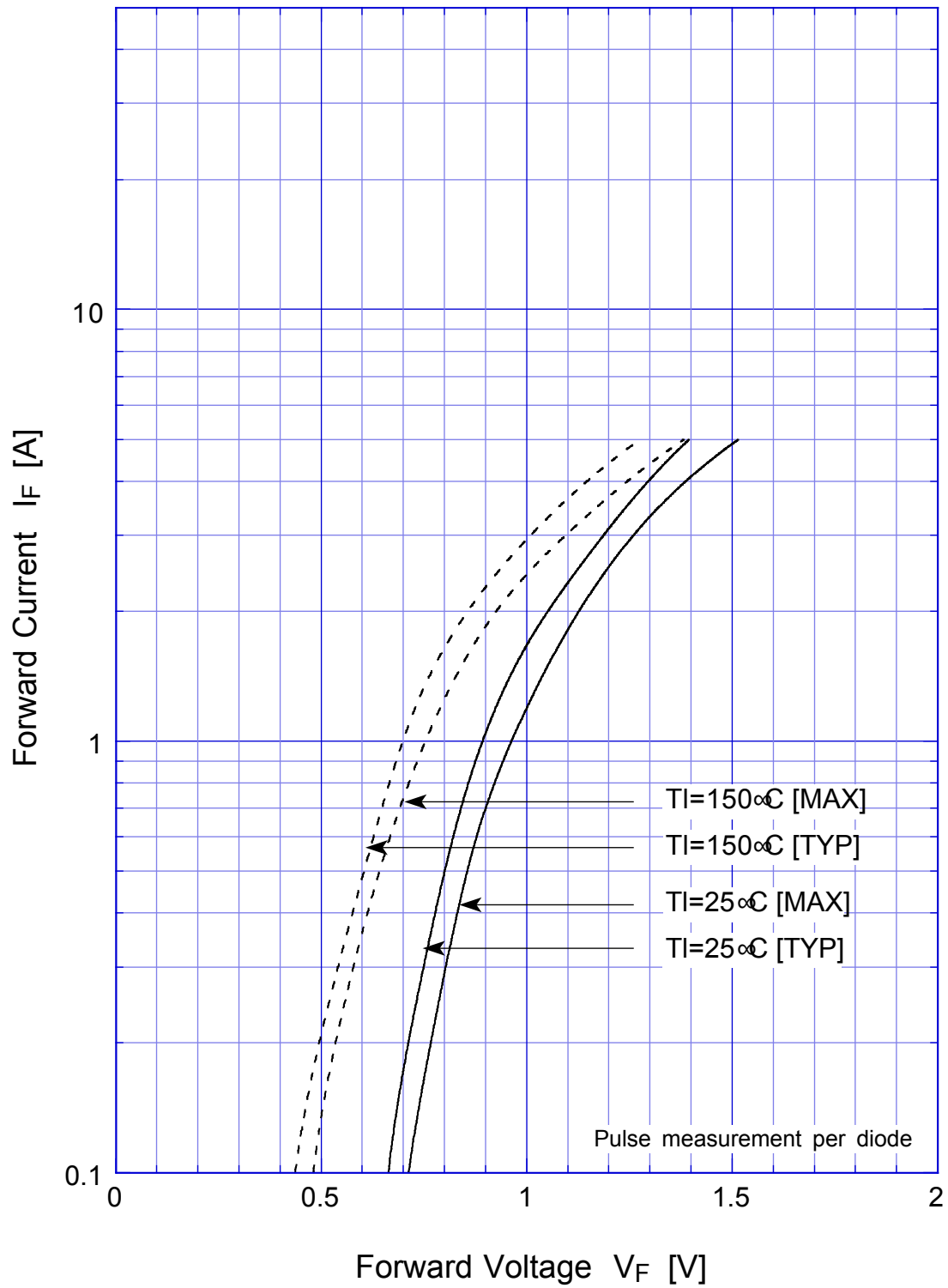
Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	Tstg		-55~150	°C
Operating Junction Temperature	Tj		150	°C
Maximum Reverse Voltage	V _{RM}		200	V
Average Rectified Forward Current	I _O	50Hz sine wave, R-load, Ta=25°C On alumina substrate	1.1	A
		50Hz sine wave, R-load, Ta=25°C On glass-epoxy substrate	0.75	
Peak Surge Forward Current	I _{FSM}	50Hz sine wave, Non-repetitive 1 cycle peak value, Tj=25°C	30	A

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

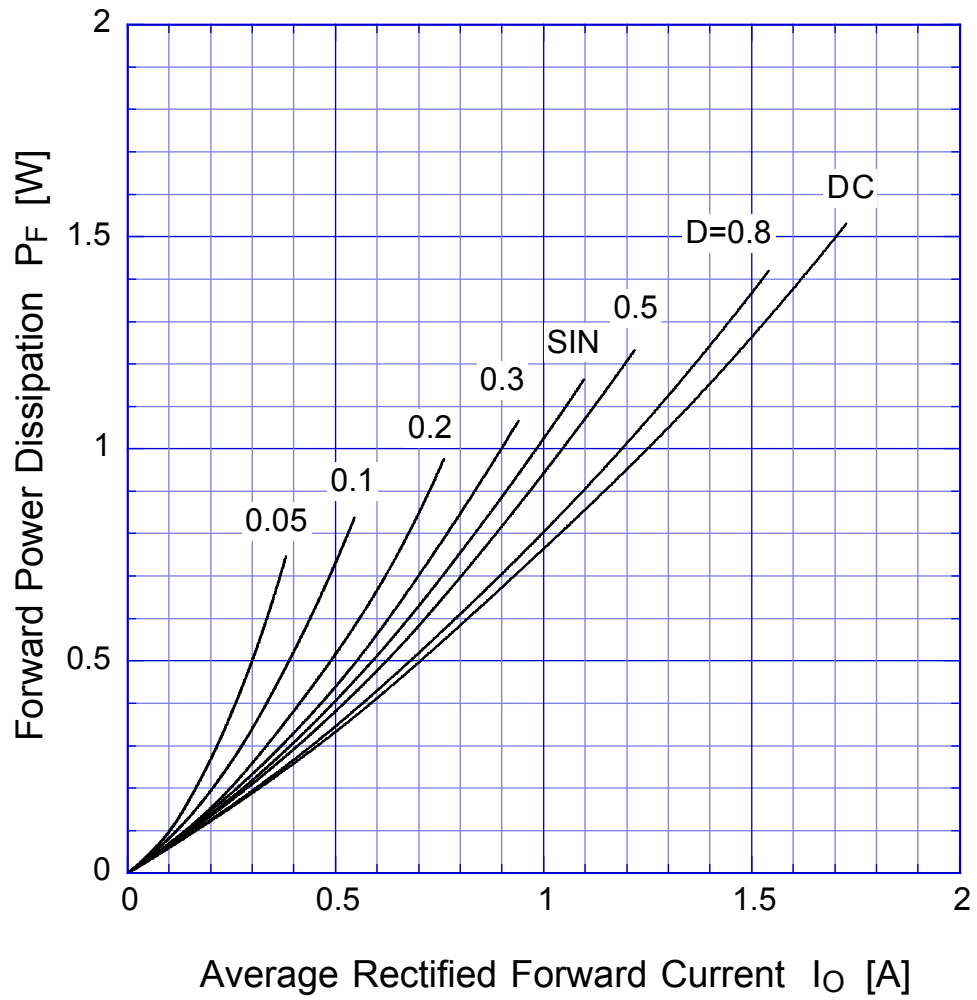
Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	V _F	I _F =1.1A, Pulse measurement	Max.0.98	V
Reverse Current	I _R	V _R =200V, Pulse measurement	Max.10	μA
Reverse Recovery Time	trr	I _F =0.5A, I _R =1A	Max.35	ns
Thermal Resistance	θ _{jl}	junction to lead	Max.20	°C/W
	θ _{ja}	junction to ambient On alumina substrate	Max.108	
		junction to ambient On glass-epoxy substrate	Max.186	

M1FL20U

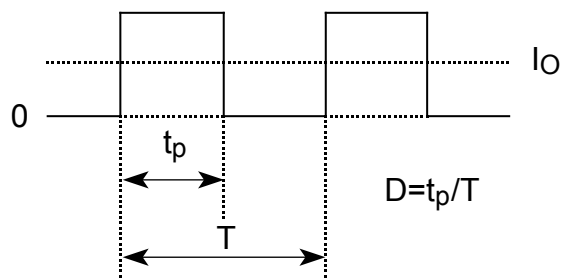
Forward Voltage



M1FL20U Forward Power Dissipation

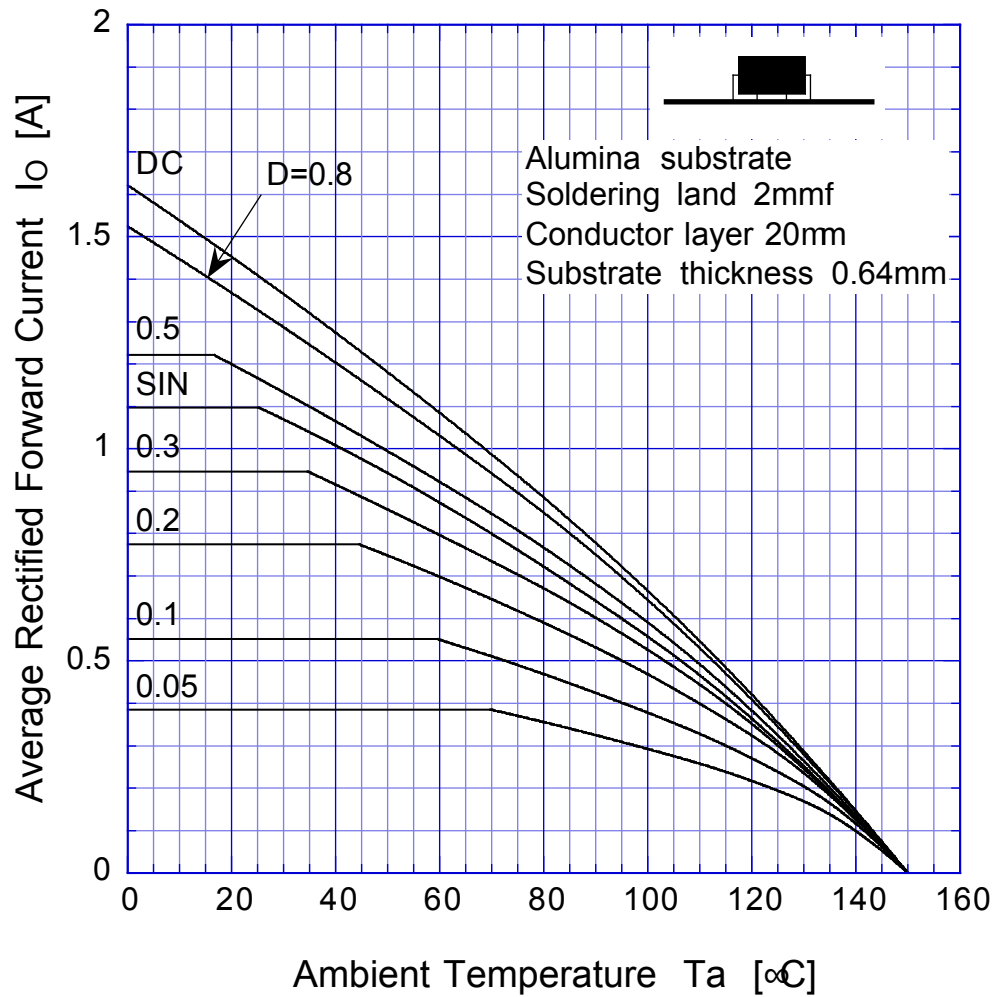


$T_j = 150^\circ\text{C}$

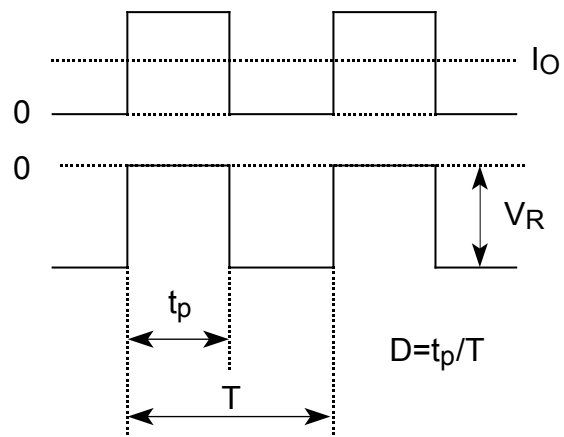


M1FL20U

Derating Curve

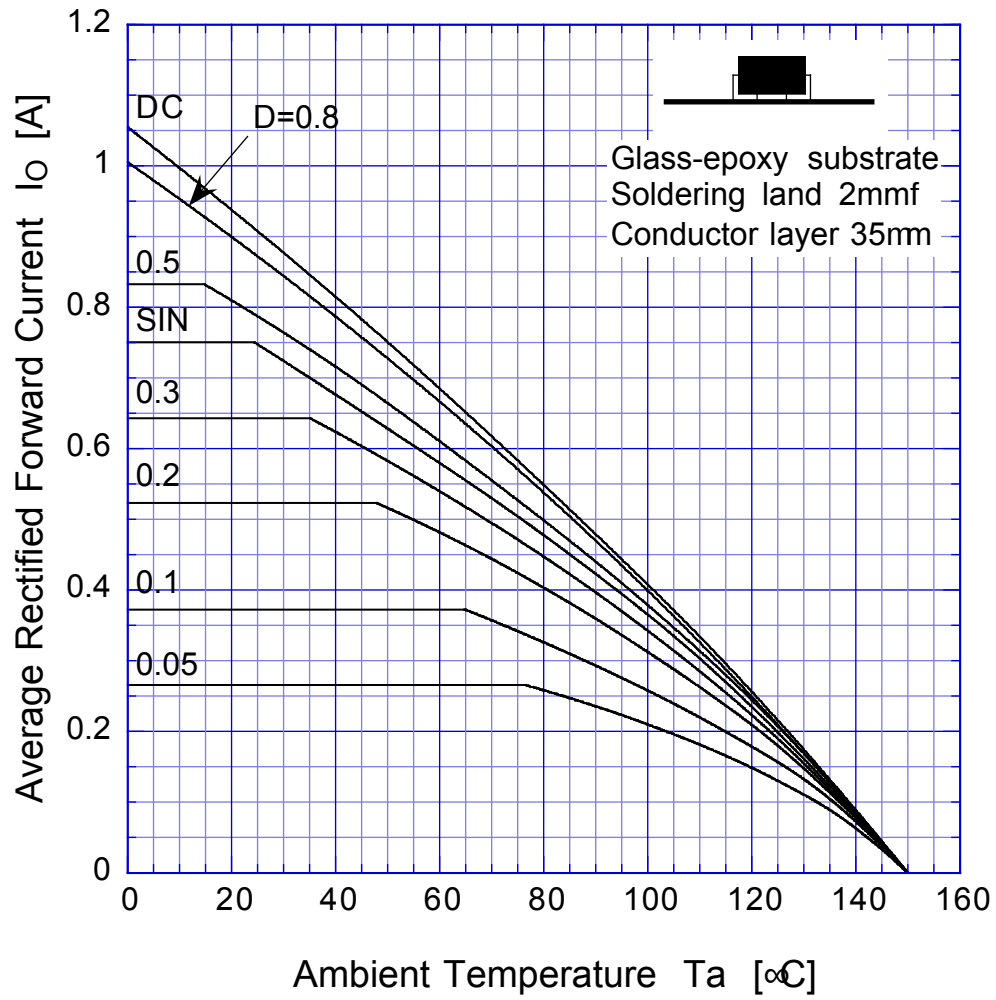


$$V_R = V_{RM}$$

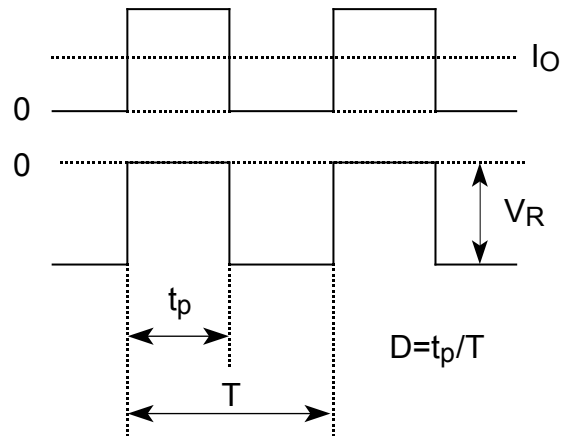


M1FL20U

Derating Curve

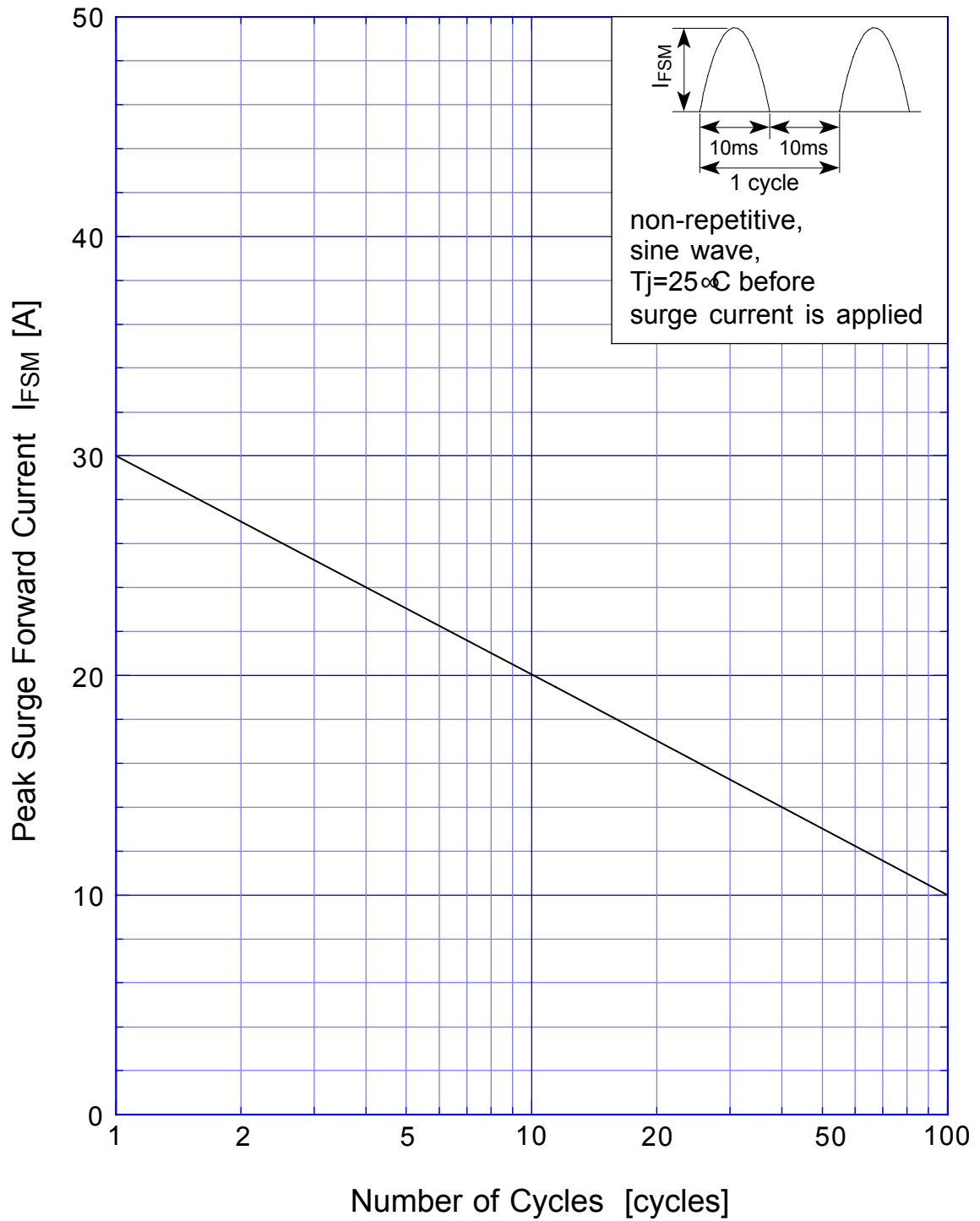


$$V_R = V_{RM}$$



M1FL20U

Peak Surge Forward Capability



M1FL20U Junction Capacitance

