

# SHINDENGEN

## Super Fast Recovery Rectifiers

Single

# M1FL20U

## 200V 1.1A

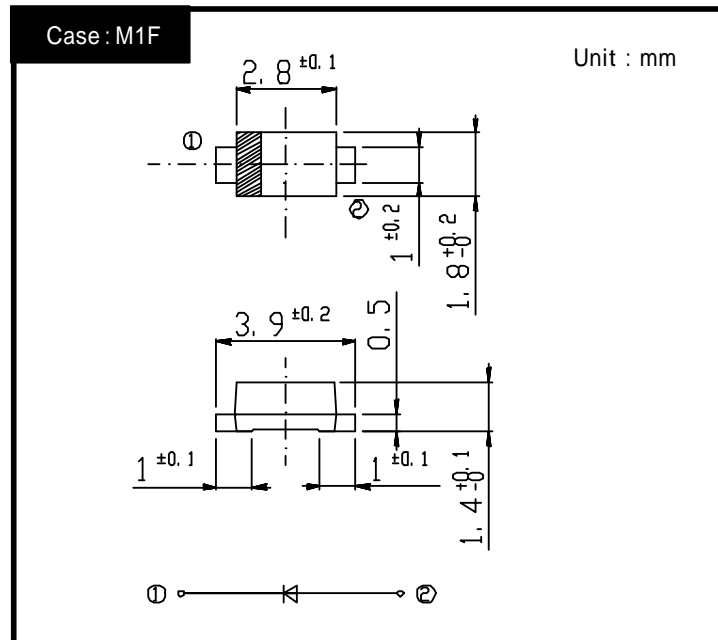
### FEATURES

Small SMT  
Low noise  
trr35ns

### APPLICATION

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

### OUTLINE DIMENSIONS



### RATINGS

Absolute Maximum Ratings (If not specified Tl=25 )

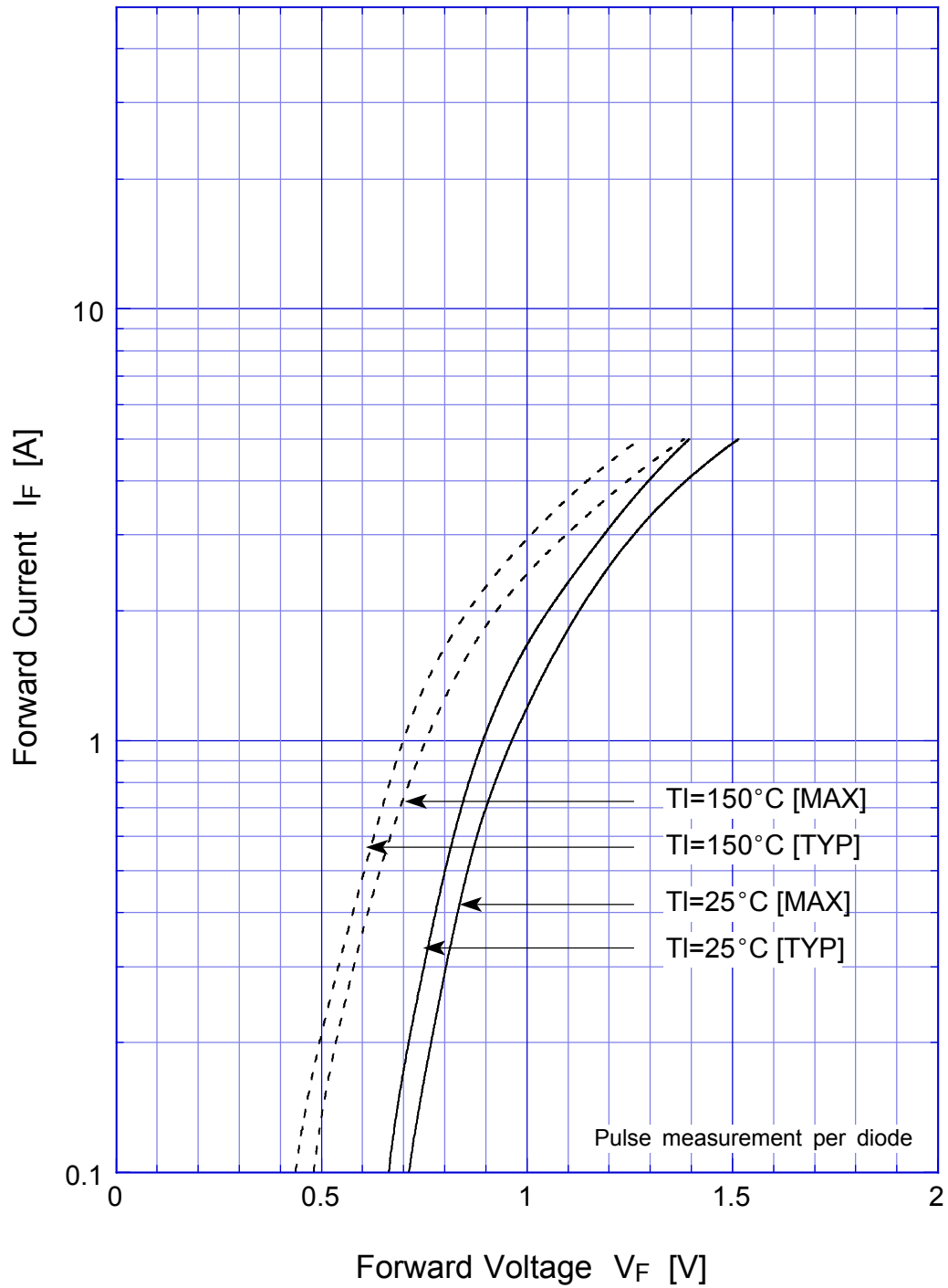
Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	Tstg		-55 ~ 150	
Operating Junction Temperature	Tj		150	
Maximum Reverse Voltage	V <sub>RM</sub>		200	V
Average Rectified Forward Current	I <sub>o</sub>	50Hz sine wave, R-load, T <sub>a</sub> =25 On alumina substrate	1.1	A
		50Hz sine wave, R-load, T <sub>a</sub> =25 On glass-epoxy substrate	0.75	
Peak Surge Forward Current	I <sub>FSM</sub>	50Hz sine wave, Non-repetitive 1 cycle peak value, T <sub>j</sub> =25	30	A

Electrical Characteristics (If not specified Tl=25 )

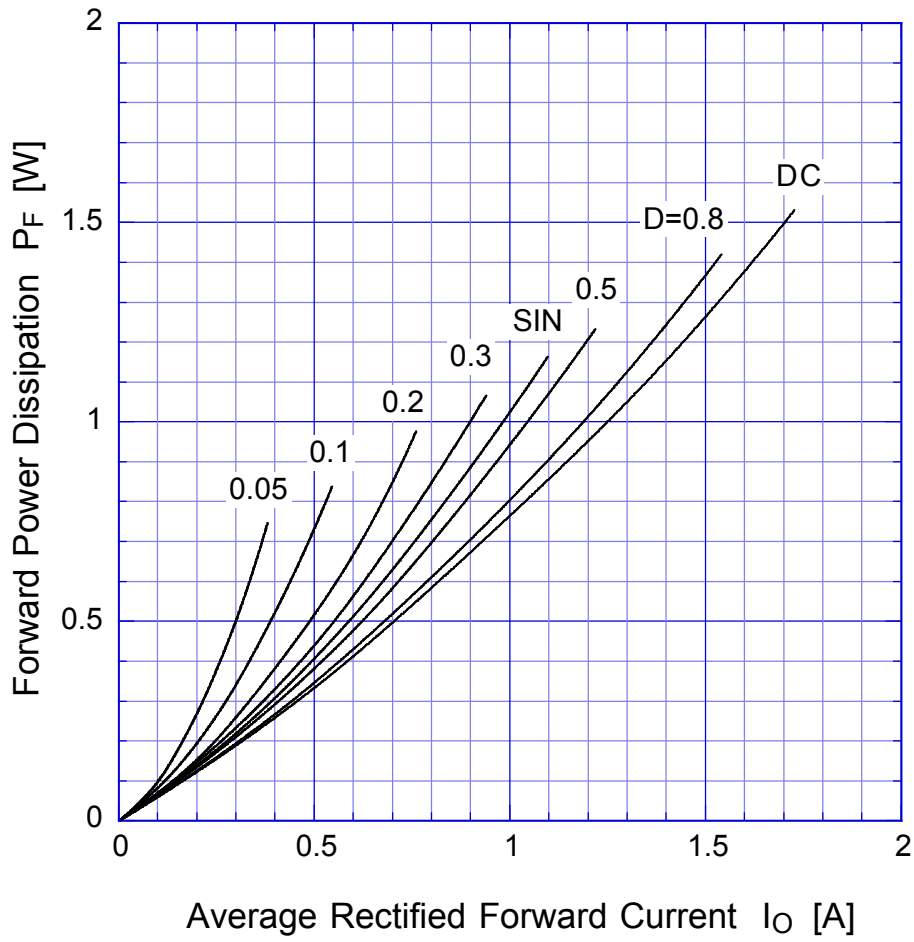
Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> =1.1A, Pulse measurement	Max.0.98	V
Reverse Current	I <sub>R</sub>	V <sub>R</sub> =200V, Pulse measurement	Max.10	μA
Reverse Recovery Time	trr	I <sub>F</sub> =0.5A, I <sub>R</sub> =1A	Max.35	ns
Thermal Resistance	j-l	junction to lead	Max.20	
	j-a	junction to ambient On alumina substrate	Max.108	/W
		junction to ambient On glass-epoxy substrate	Max.186	

# M1FL20U

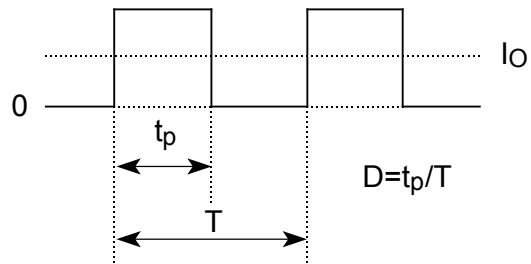
## Forward Voltage



# M1FL20U Forward Power Dissipation

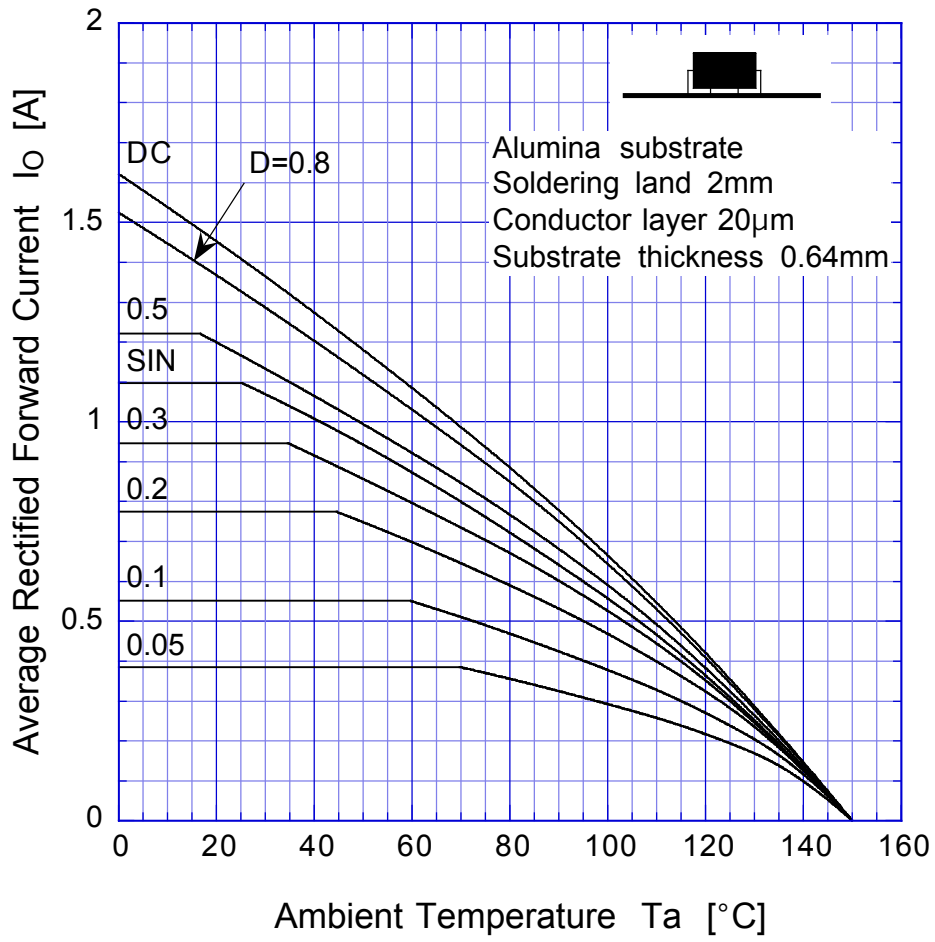


$T_j = 150^\circ\text{C}$

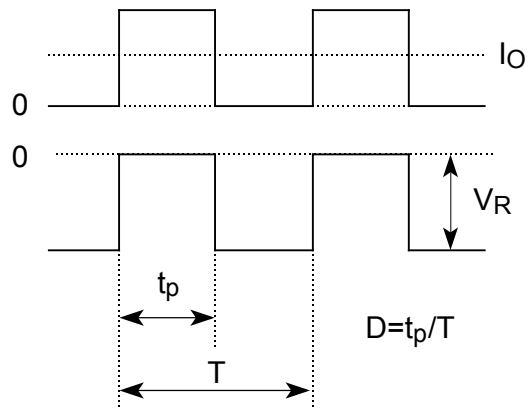


# M1FL20U

## Derating Curve

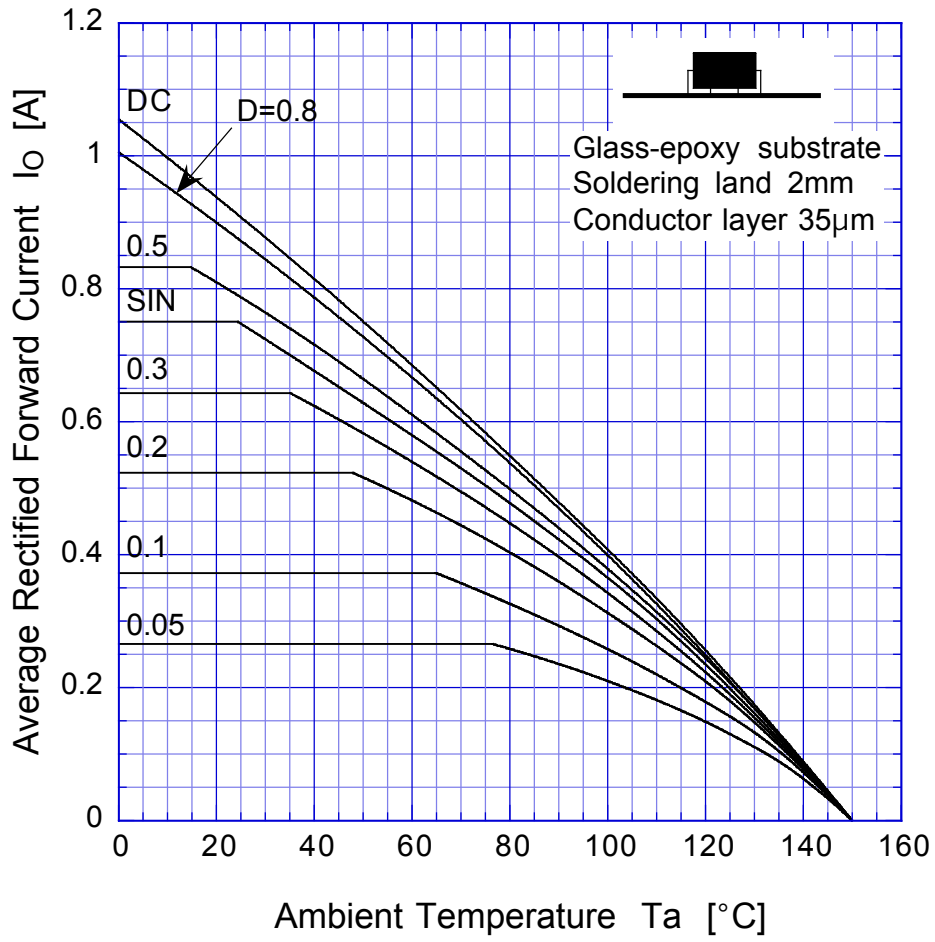


$$V_R = V_{RM}$$

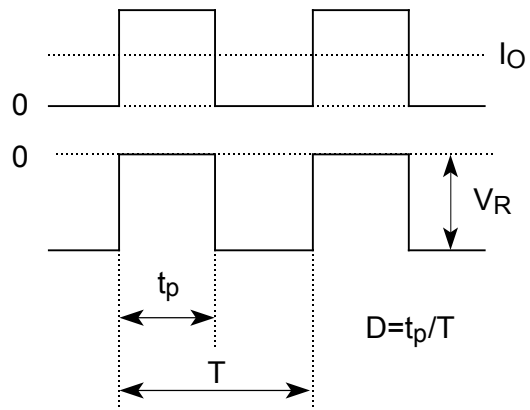


# M1FL20U

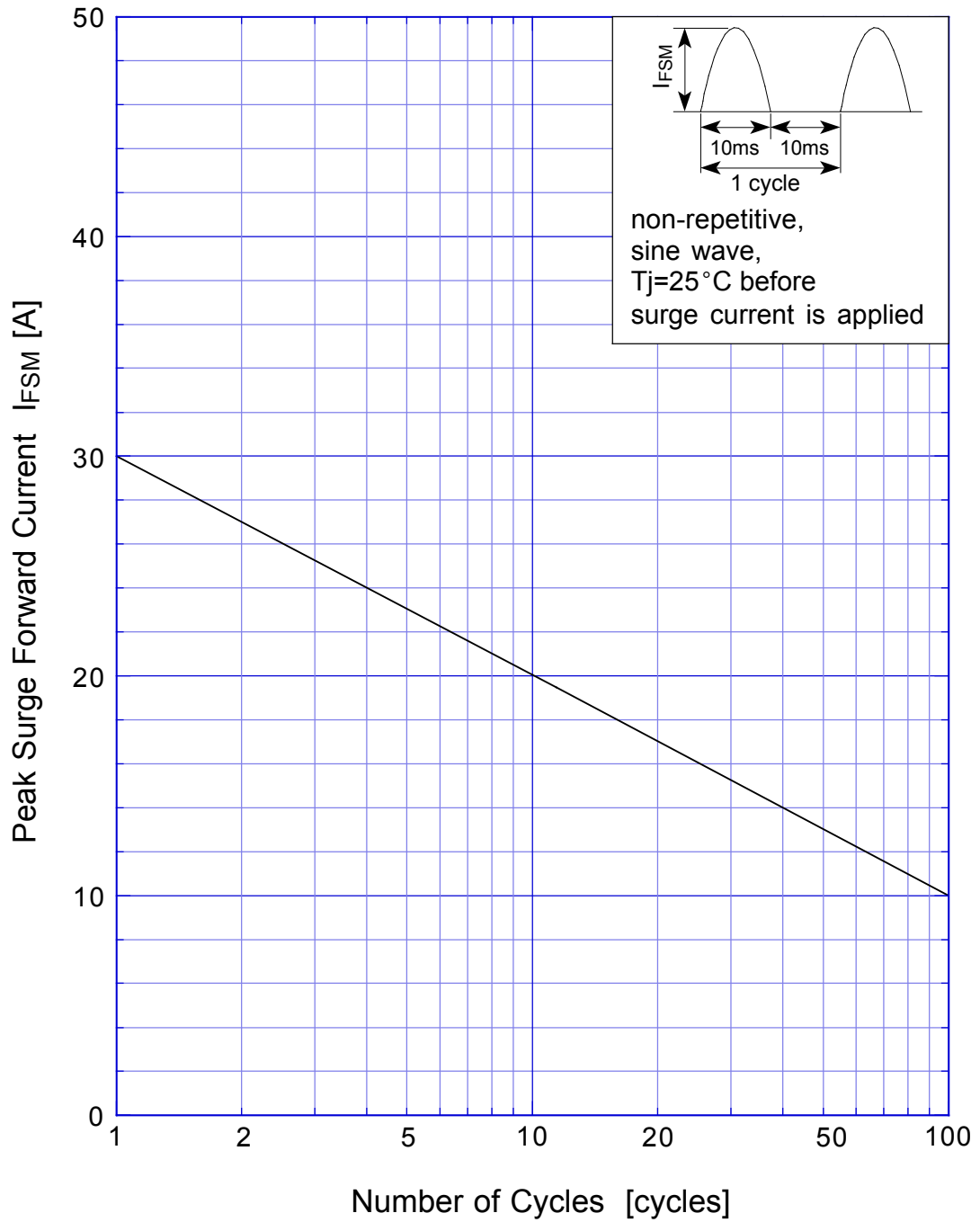
## Derating Curve



$$V_R = V_{RM}$$



# M1FL20U Peak Surge Forward Capability



# M1FL20U Junction Capacitance

