

SHINDENGEN

Super Fast Recovery Rectifiers

Single

M1FL20U

200V 1.1A

FEATURES

- Small SMT
- Low noise
- trr35ns

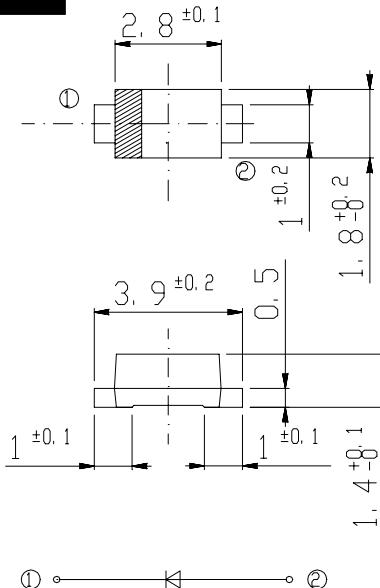
APPLICATION

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

OUTLINE DIMENSIONS

Case : M1F

Unit : mm



RATINGS

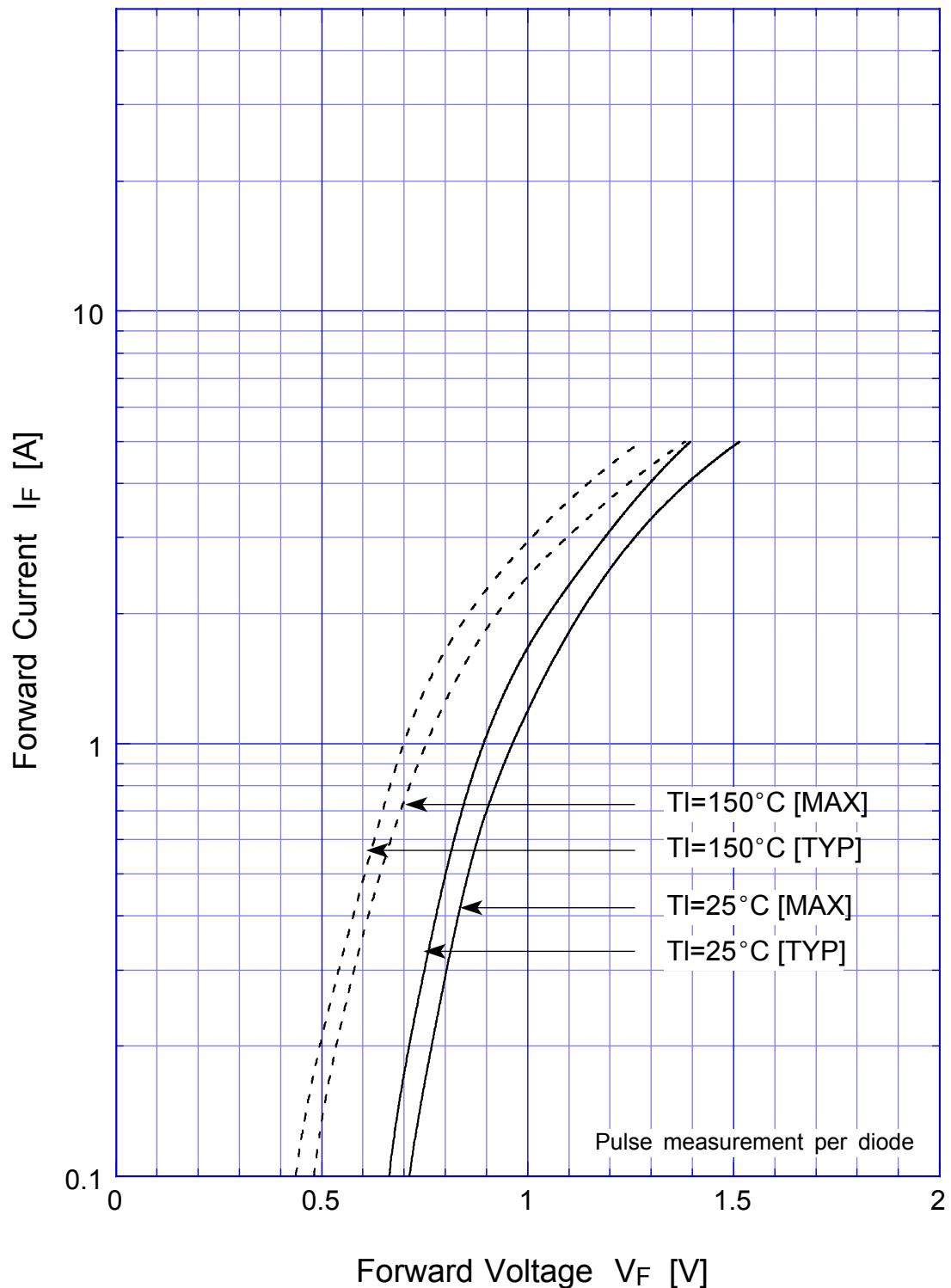
● Absolute Maximum Ratings (If not specified $T_I=25^\circ\text{C}$)

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}		200	V
Average Rectified Forward Current	I_O	50Hz sine wave, R-load, $T_a=25^\circ\text{C}$ On alumina substrate	1.1	A
		50Hz sine wave, R-load, $T_a=25^\circ\text{C}$ On glass-epoxy substrate	0.75	
Peak Surge Forward Current	I_{FSM}	50Hz sine wave, Non-repetitive 1 cycle peak value, $T_j=25^\circ\text{C}$	30	A

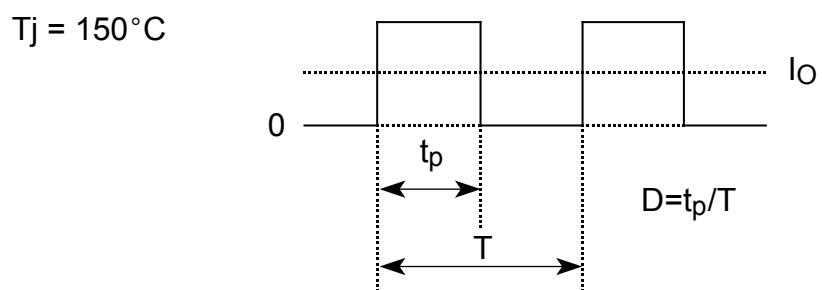
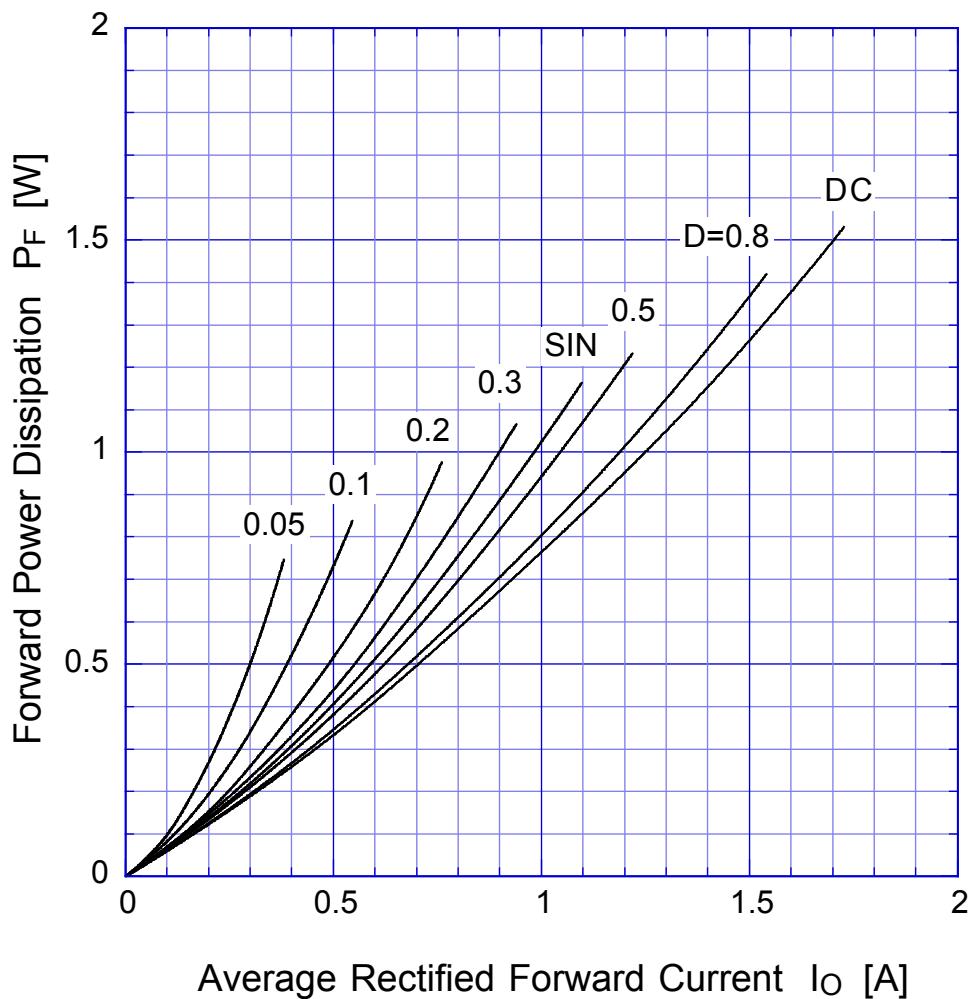
● Electrical Characteristics (If not specified $T_I=25^\circ\text{C}$)

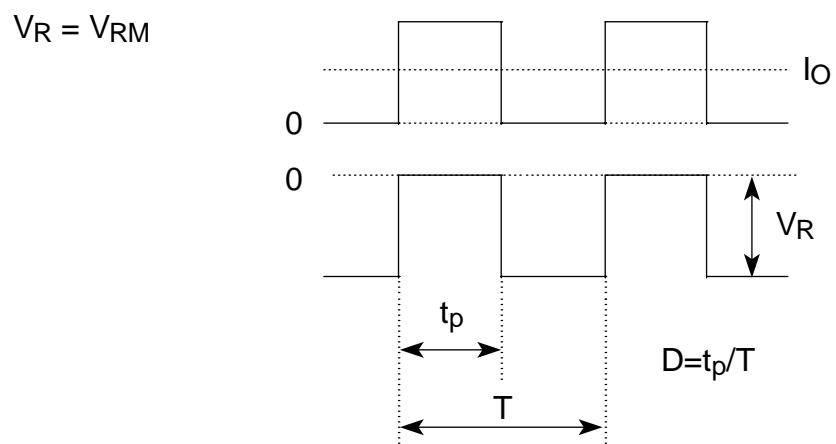
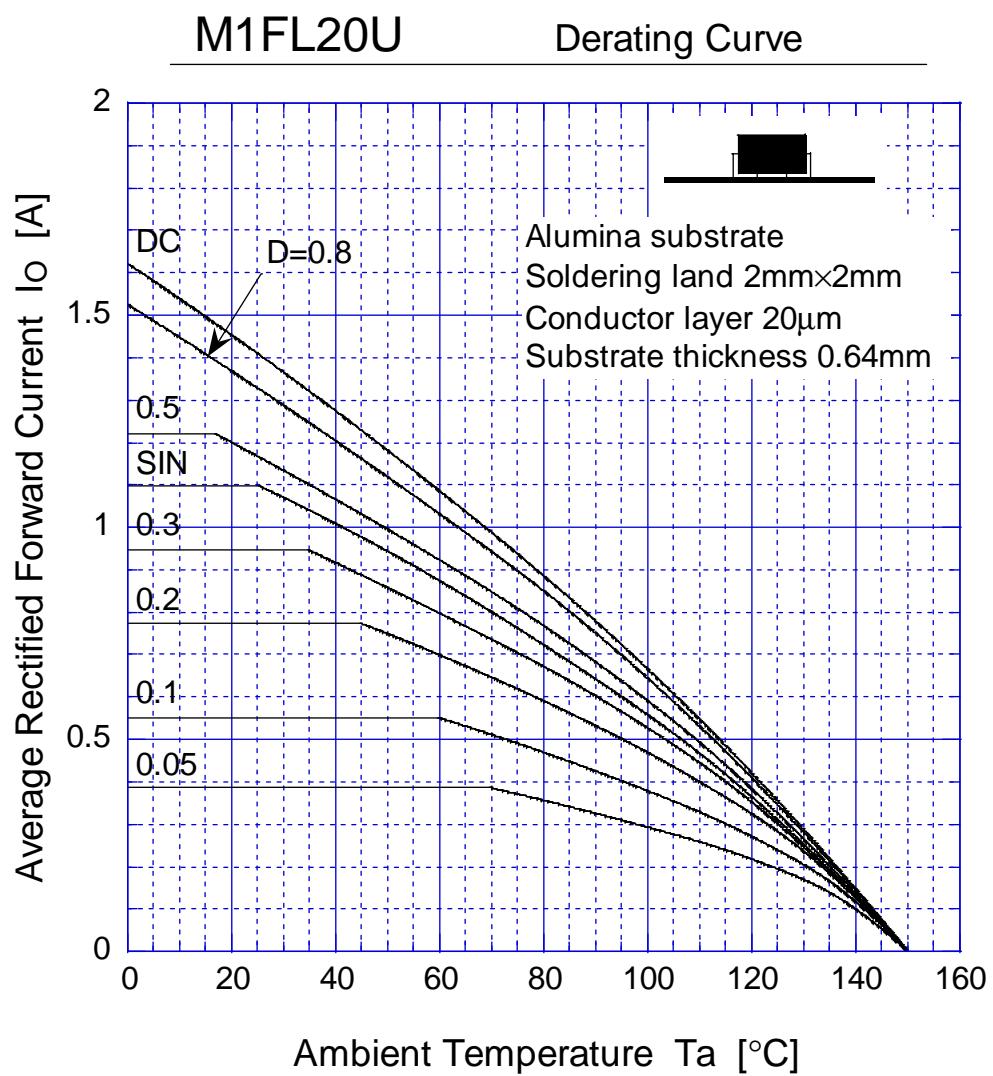
Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	V_F	$I_F=1.1\text{A}$, Pulse measurement	Max.0.98	V
Reverse Current	I_R	$V_R=200\text{V}$, Pulse measurement	Max.10	μA
Reverse Recovery Time	trr	$I_F=0.5\text{A}$, $I_R=1\text{A}$	Max.35	ns
Thermal Resistance	θ_{jl}	junction to lead	Max.20	$^\circ\text{C}/\text{W}$
	θ_{ja}	junction to ambient On alumina substrate	Max.108	
		junction to ambient On glass-epoxy substrate	Max.186	

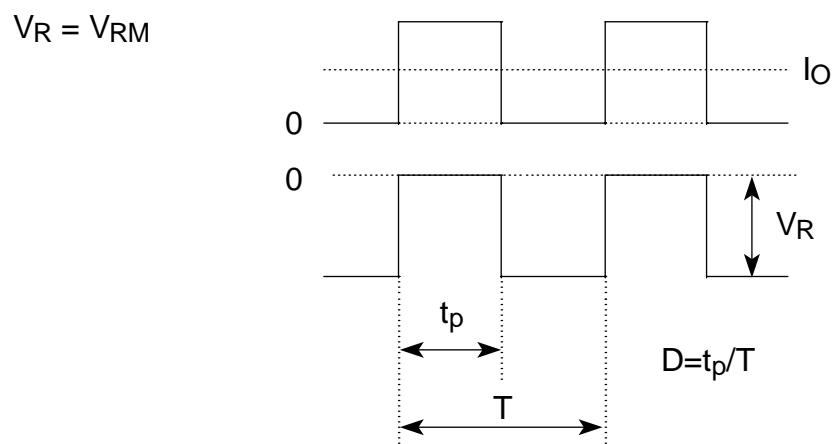
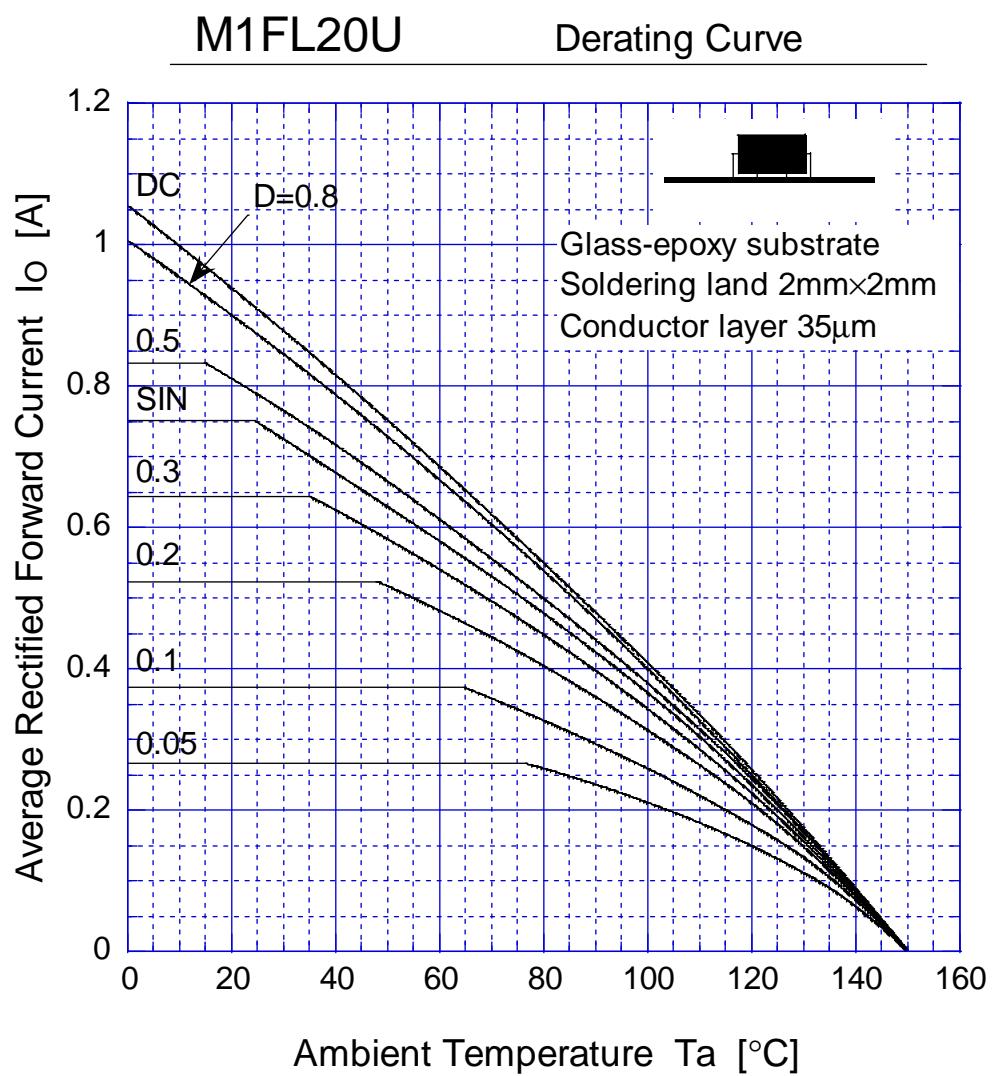
M1FL20U Forward Voltage



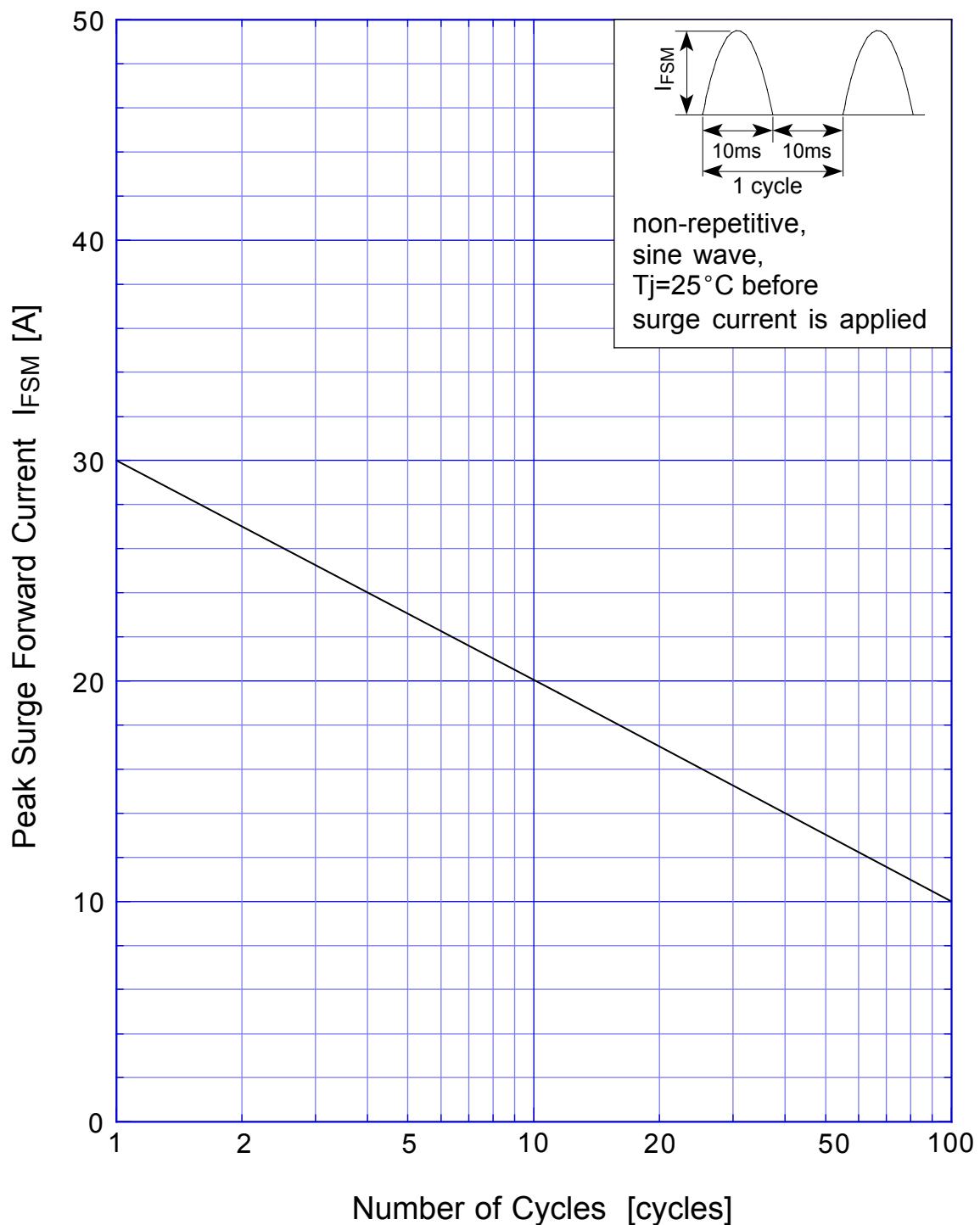
M1FL20U Forward Power Dissipation







M1FL20U Peak Surge Forward Capability



M1FL20U Junction Capacitance

