

M1FL20U

200V 1.1A

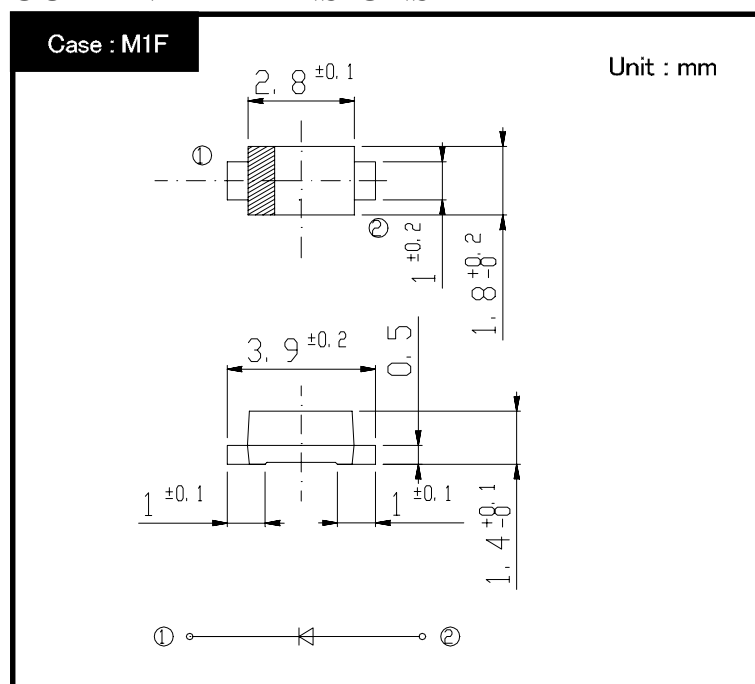
FEATURES

- 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°C)

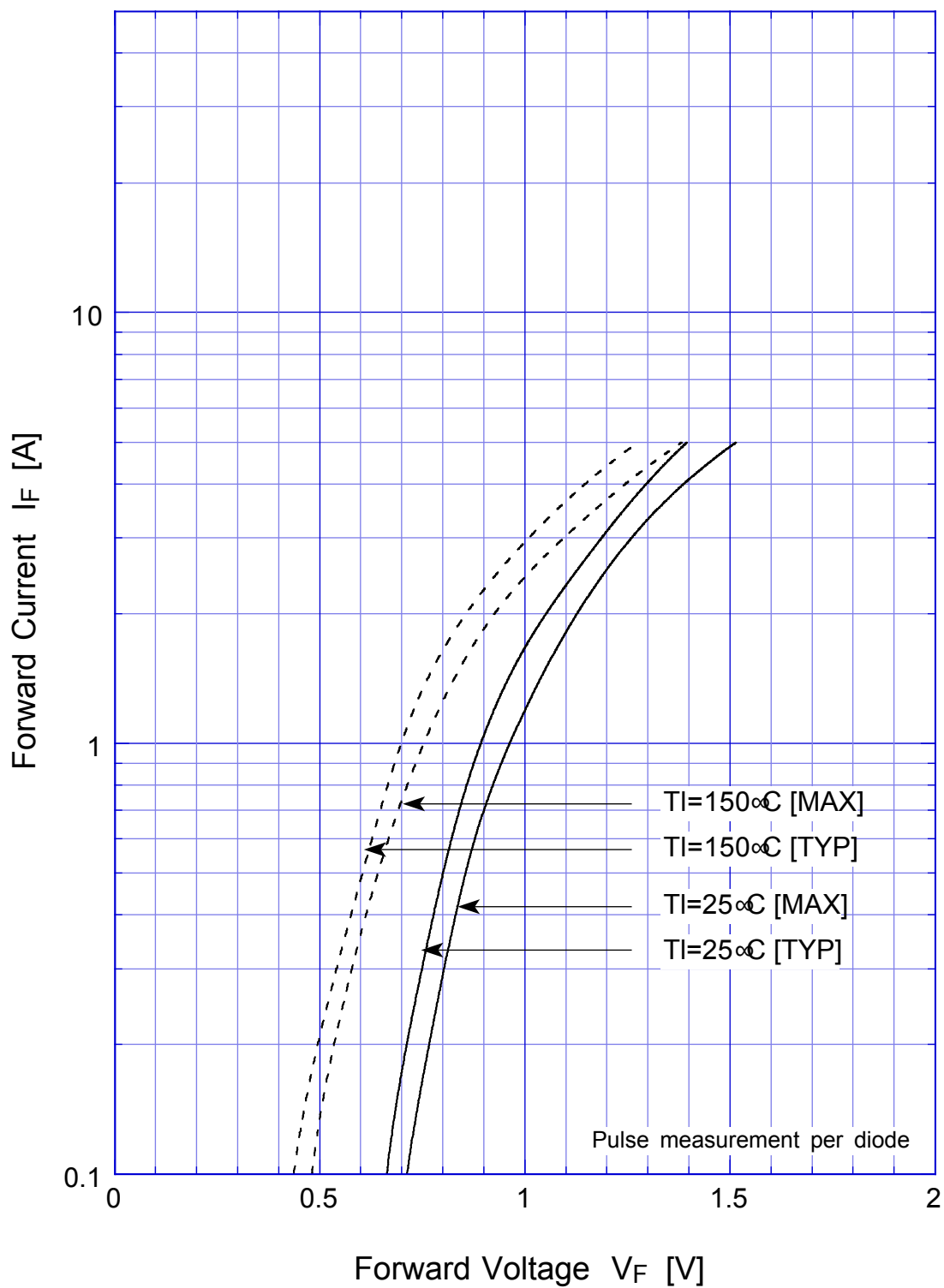
Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	T _{stg}		-55~150	°C
Operating Junction Temperature	T _j		150	°C
Maximum Reverse Voltage	V _{RM}		200	V
Average Rectified Forward Current	I _O	50Hz sine wave, R-load, T _a =25°C On alumina substrate	1.1	A
		50Hz sine wave, R-load, T _a =25°C On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

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

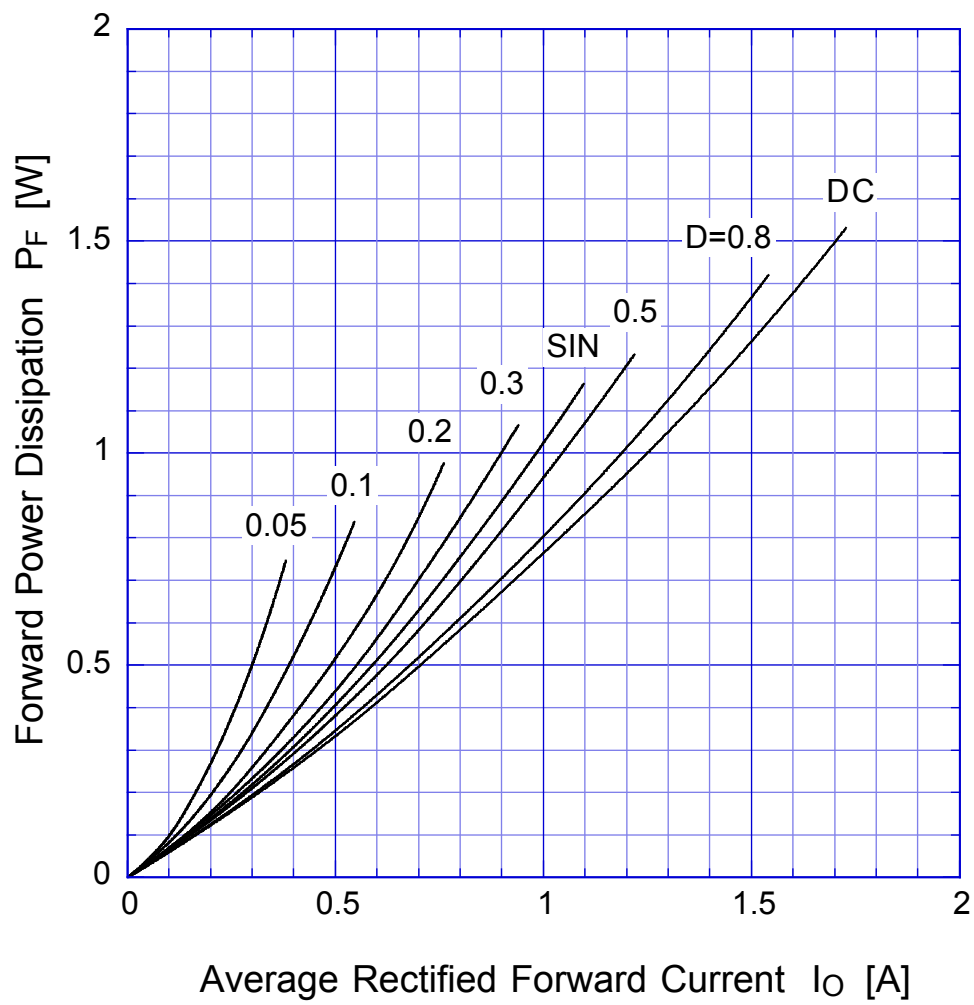
Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	V _F	I _F =1.1A, Pulse measurement	Max.0.98	V
Reverse Current	I _R	V _R =200V, Pulse measurement	Max.10	μA
Reverse Recovery Time	trr	I _F =0.5A, I _R =1A	Max.35	ns
Thermal Resistance	θ _{jl}	junction to lead	Max.20	°C/W
	θ _{ja}	junction to ambient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

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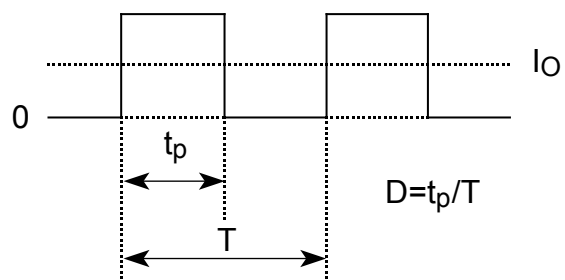
Forward Voltage



M1FL20U Forward Power Dissipation

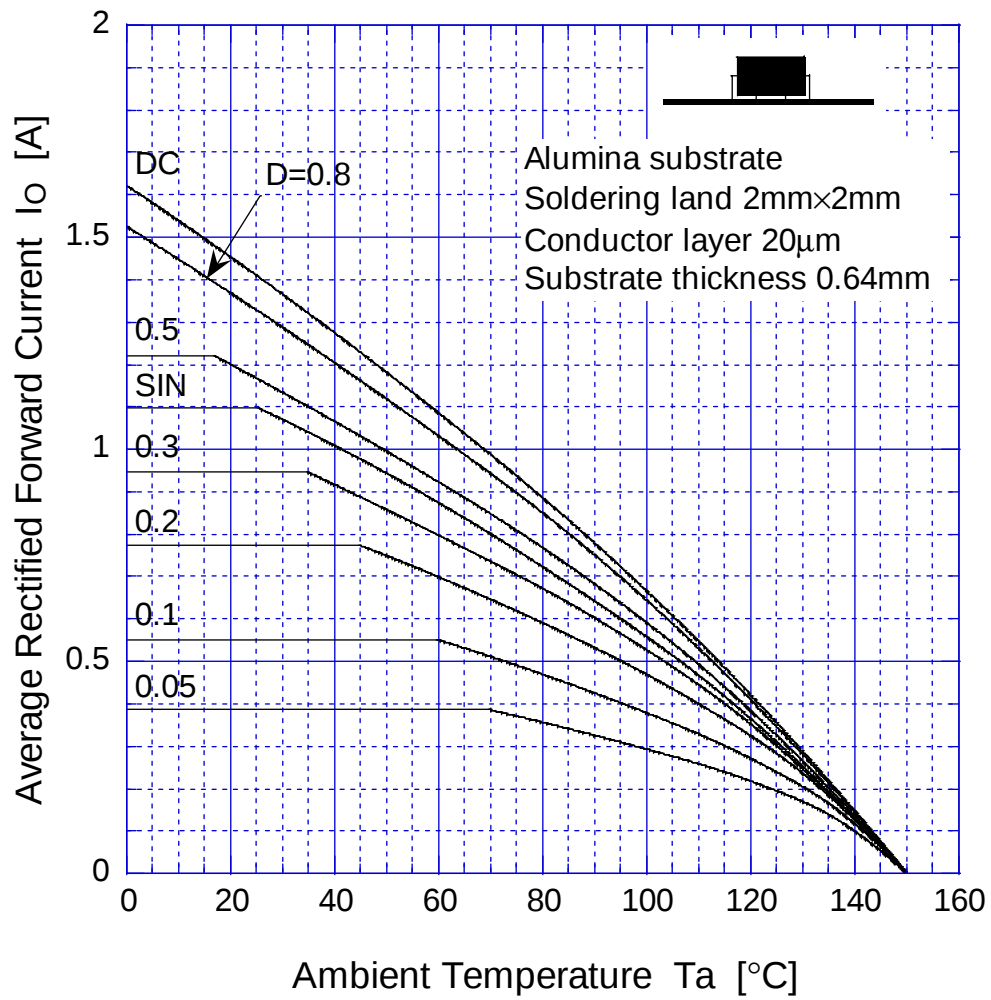


$T_j = 150^\circ\text{C}$

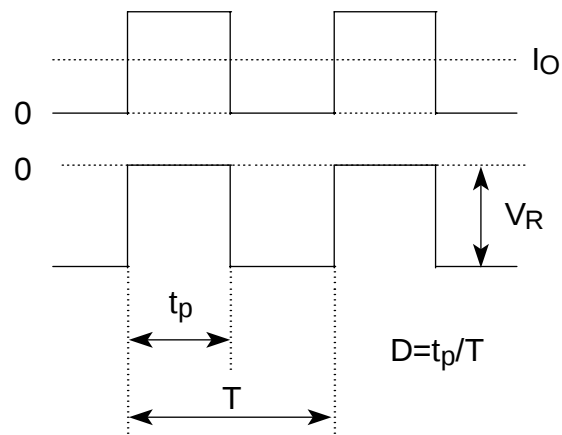


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Derating Curve

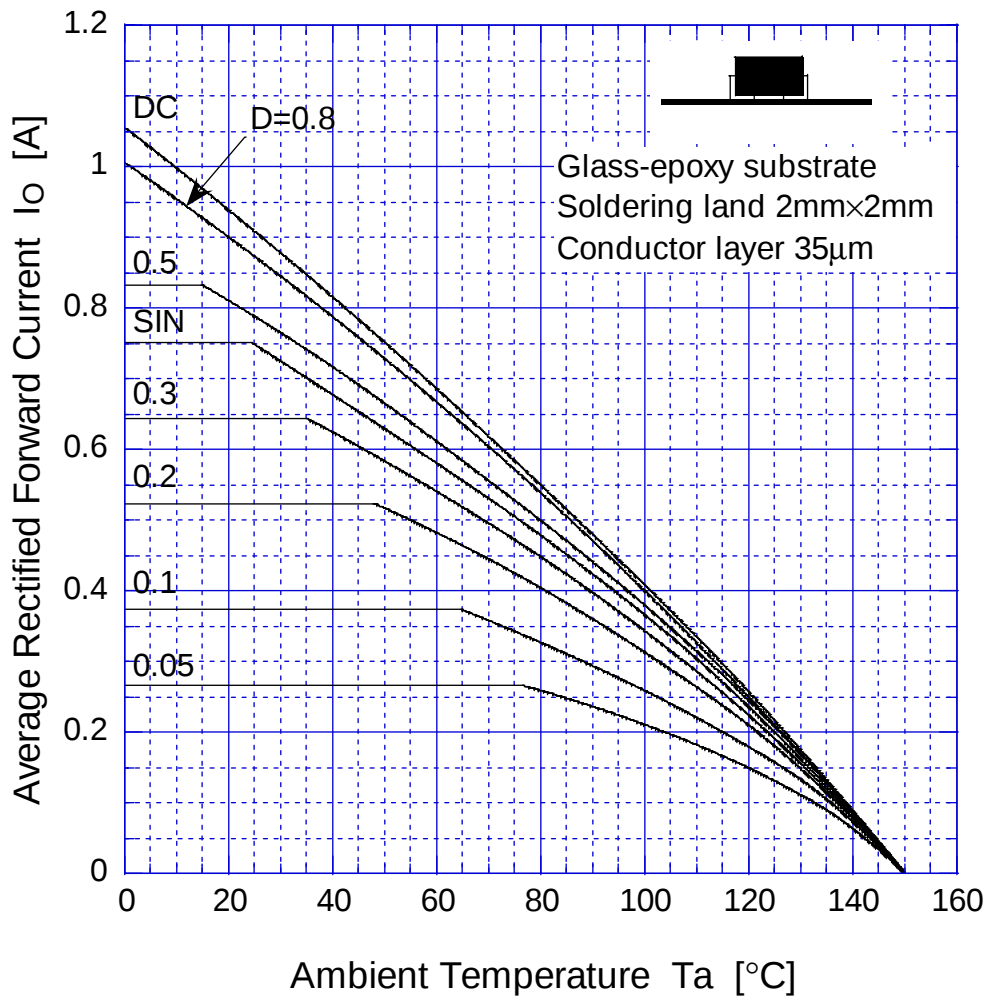


$$V_R = V_{RM}$$

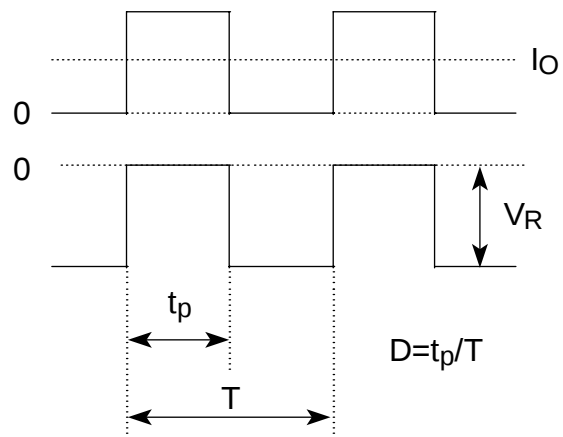


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Derating Curve

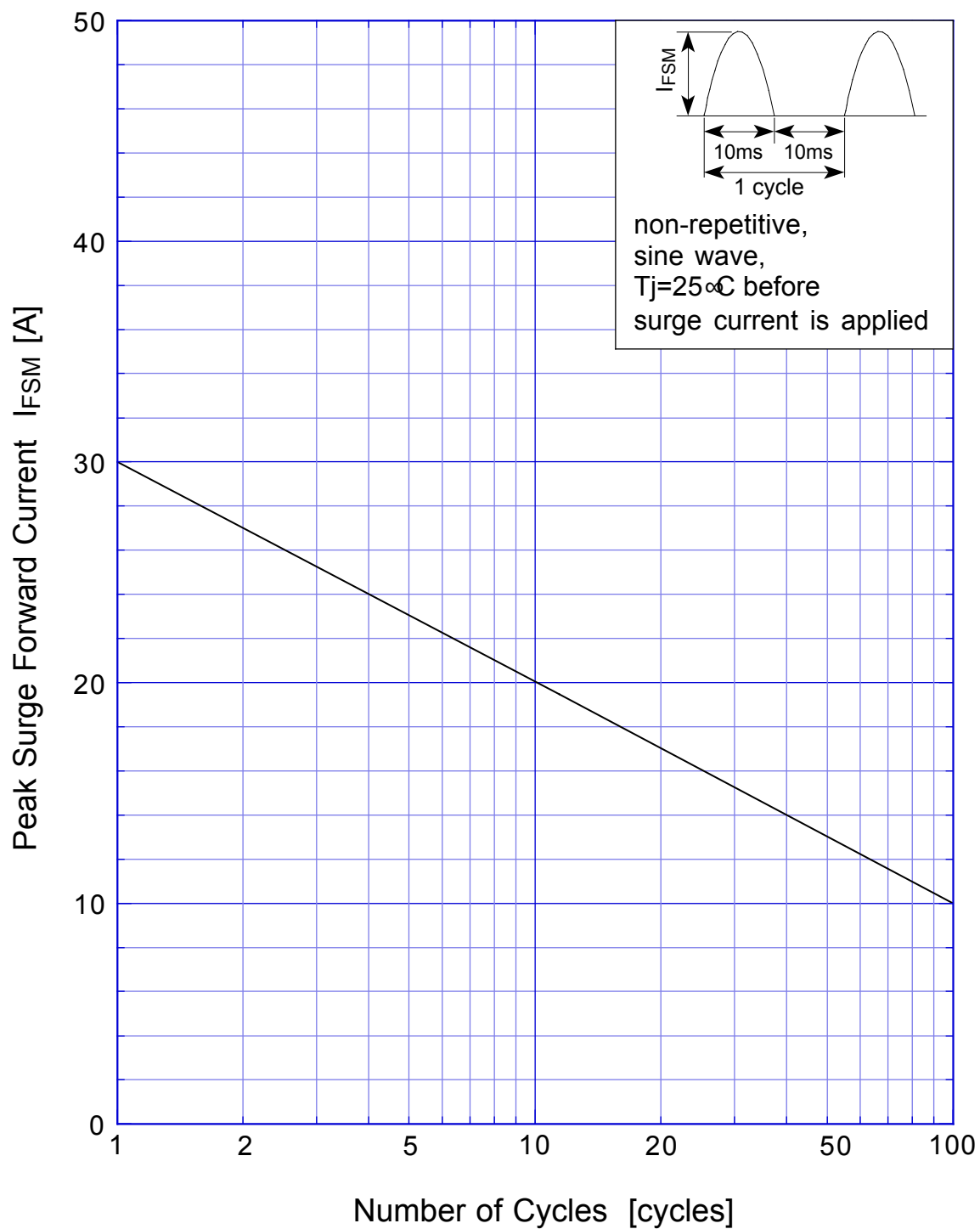


$$V_R = V_{RM}$$



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Peak Surge Forward Capability



M1FL20U Junction Capacitance

