

SHINDENGEN

Super Fast Recovery Rectifiers

Single

D1FL20U

200V 1.1A

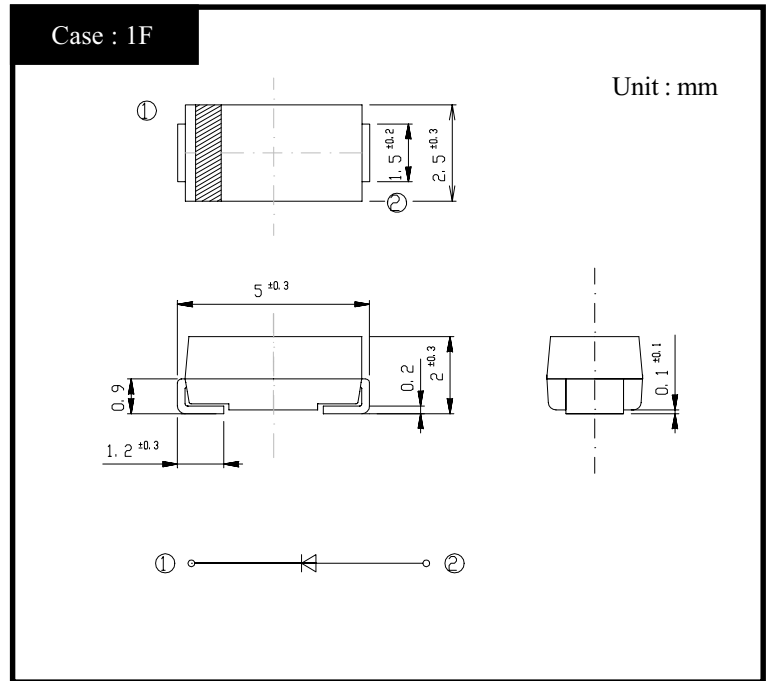
FEATURES

- 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 $T_I=25^{\circ}\text{C}$)

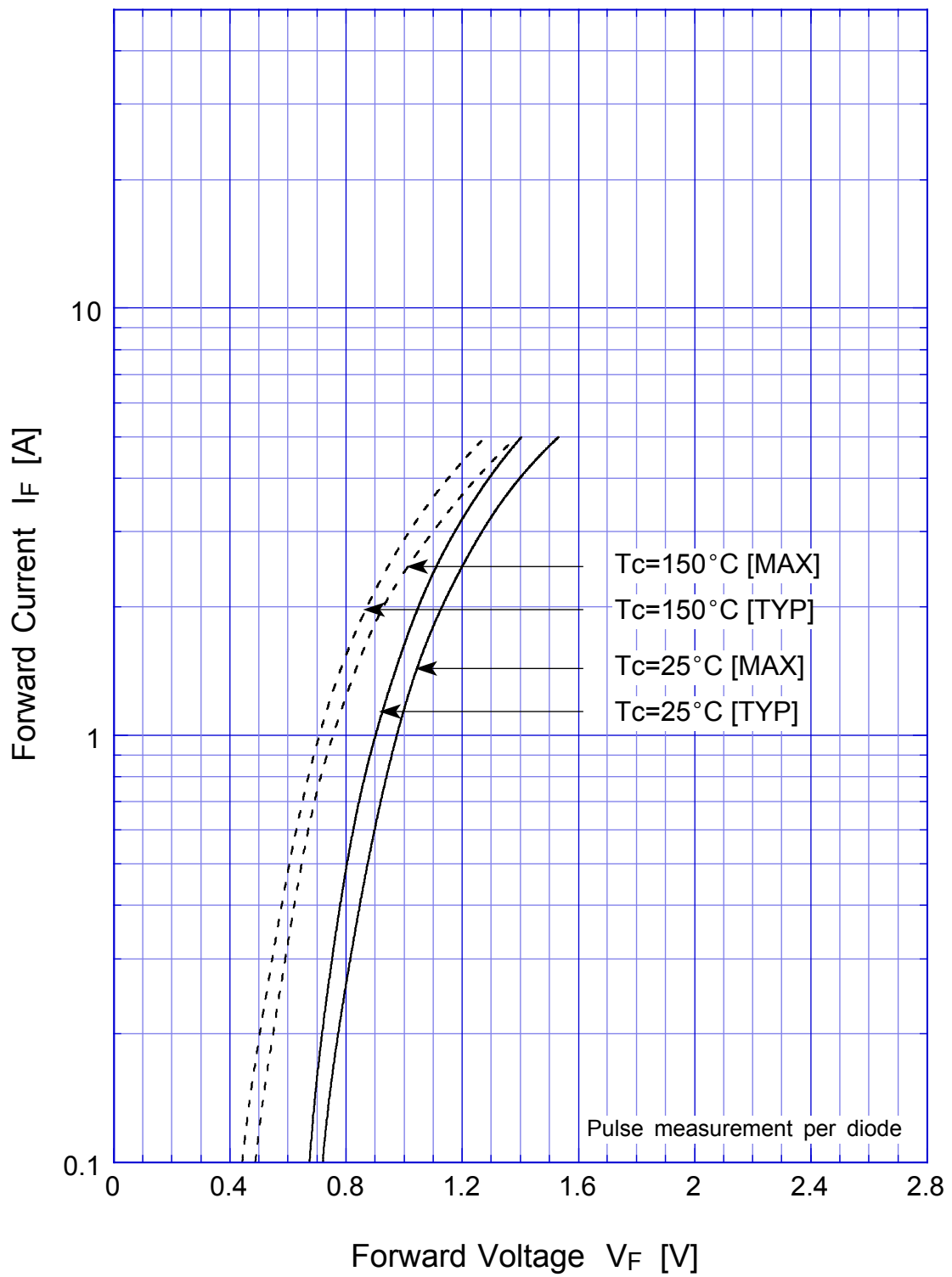
Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	T_{stg}		-55~150	$^{\circ}\text{C}$
Operating Junction Temperature	T_j		150	$^{\circ}\text{C}$
Maximum Reverse Voltage	V_{RM}		200	V
Average Rectified Forward Current	I_o	50Hz sine wave, R-load, $T_a=25^{\circ}\text{C}$ On alumina substrate	1.1	A
		50Hz sine wave, R-load, $T_a=25^{\circ}\text{C}$ On glass-epoxy substrate	0.84	
Peak Surge Forward Current	I_{FSM}	50Hz sine wave, Non-repetitive 1 cycle peak value, $T_j=25^{\circ}\text{C}$	20	A

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

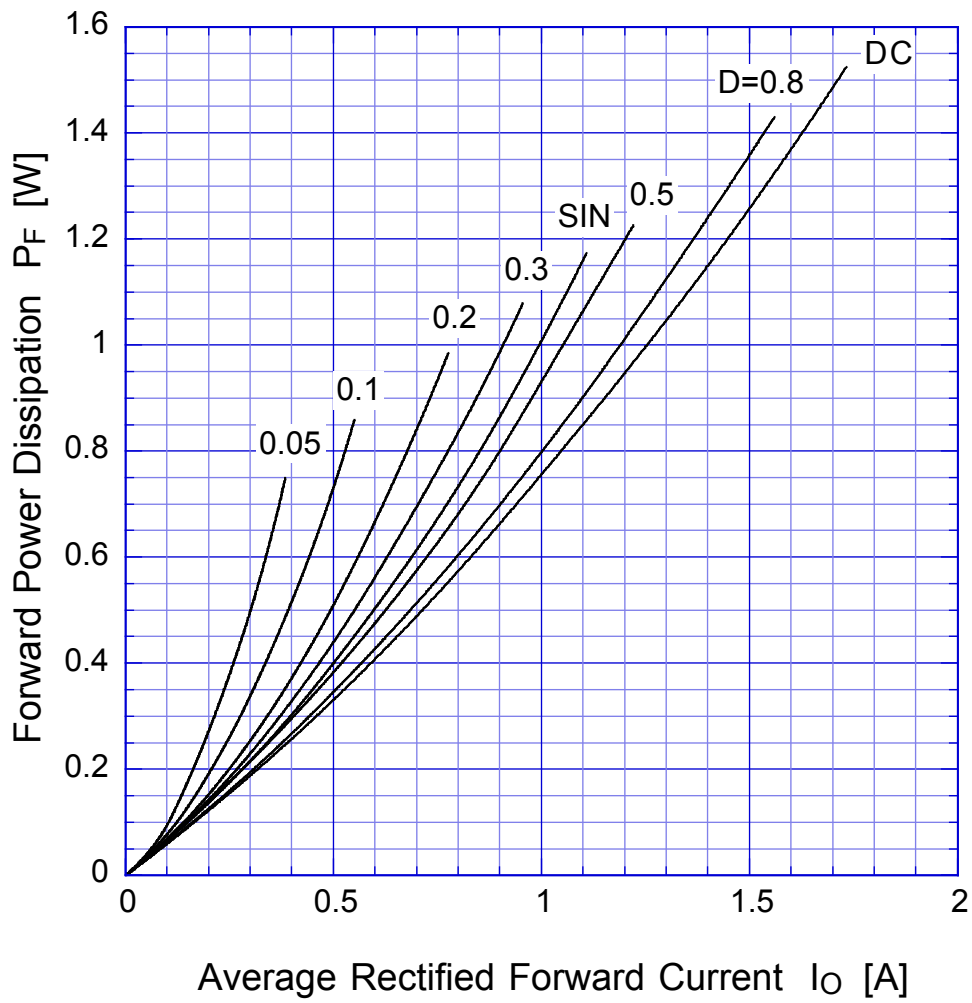
Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	V_F	$I_F=1.1\text{A}$, Pulse measurement	Max.0.98	V
Reverse Current	I_R	$V_R=V_{RM}$, Pulse measurement	Max.10	μA
Reverse Recovery Time	t_{rr}	$I_F=0.5\text{A}$, $I_R=1\text{A}$	Max.35	ns
Thermal Resistance	θ_{jl}	junction to lead	Max.23	$^{\circ}\text{C}/\text{W}$
	θ_{ja}	junction to ambient, On alumina substrate	Max.108	
		junction to ambient, On glass-epoxy substrate	Max.157	

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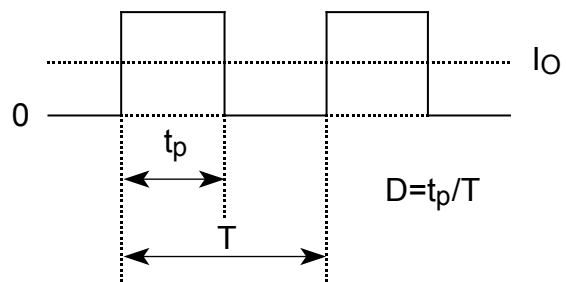
Forward Voltage



D1FL20U Forward Power Dissipation

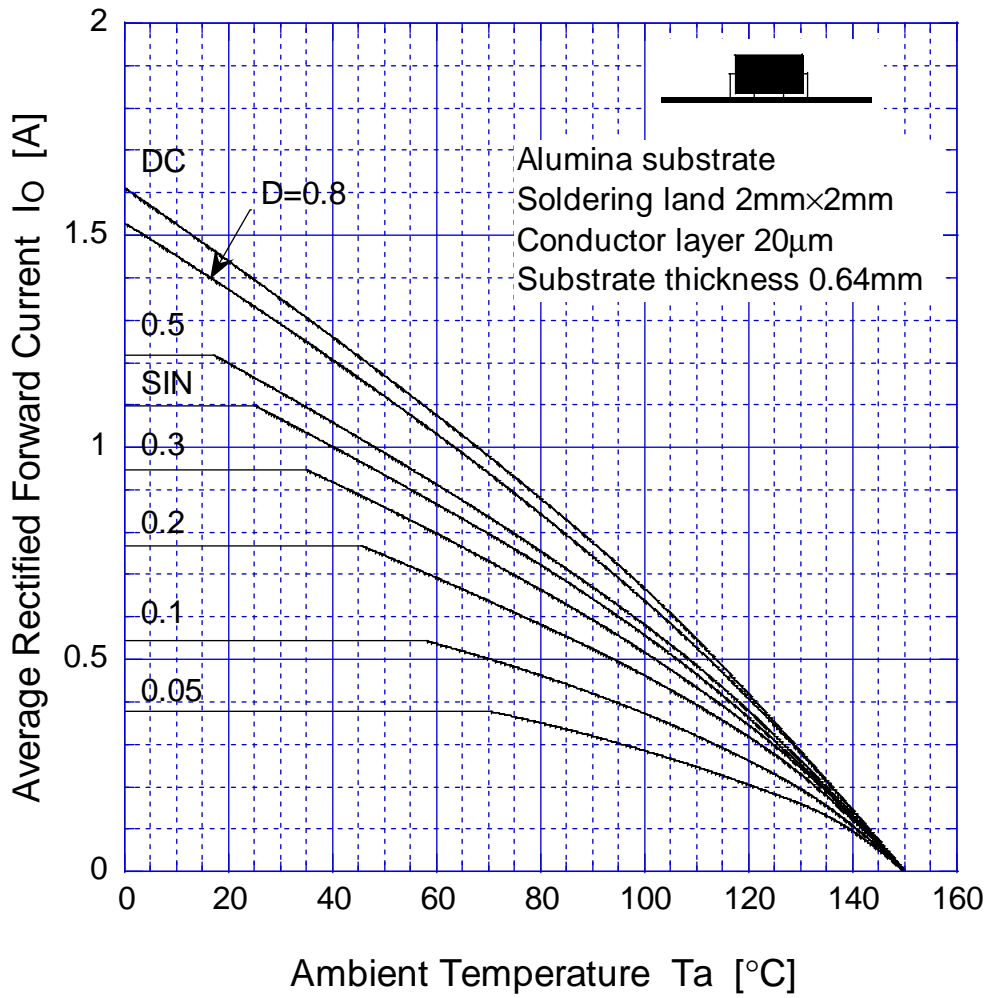


$T_j = T_{jmax}$

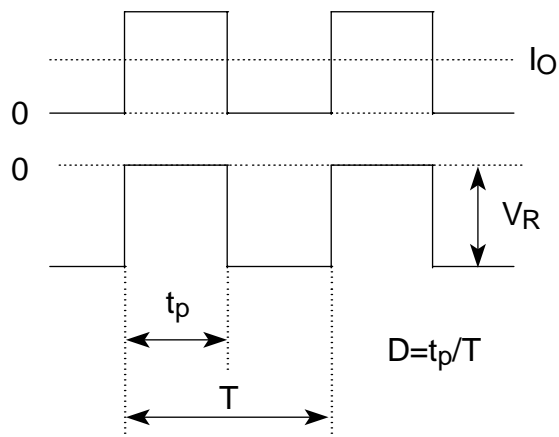


D1FL20U

Derating Curve

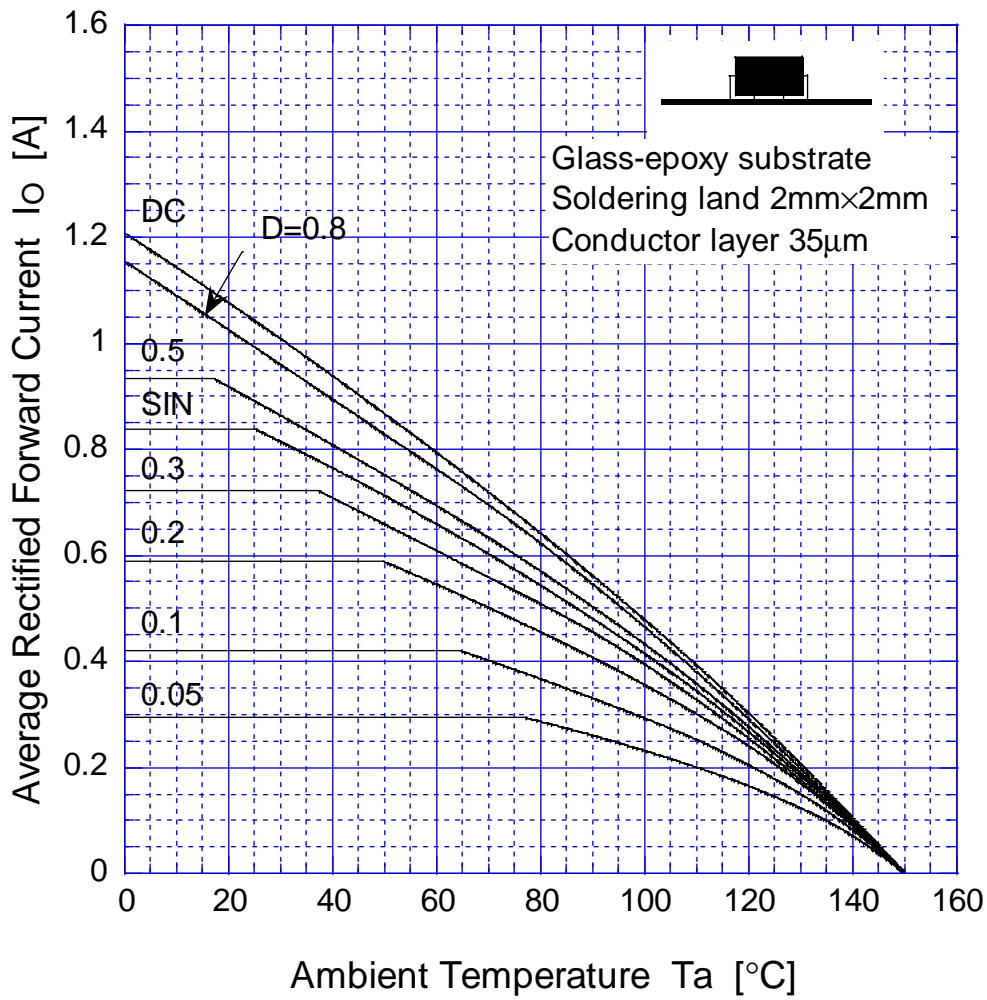


$$V_R = V_{RM}$$

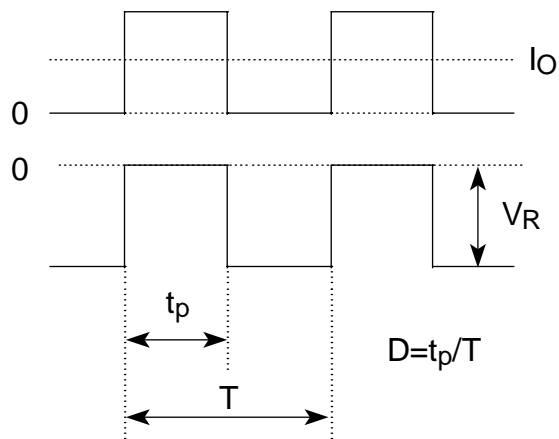


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Derating Curve

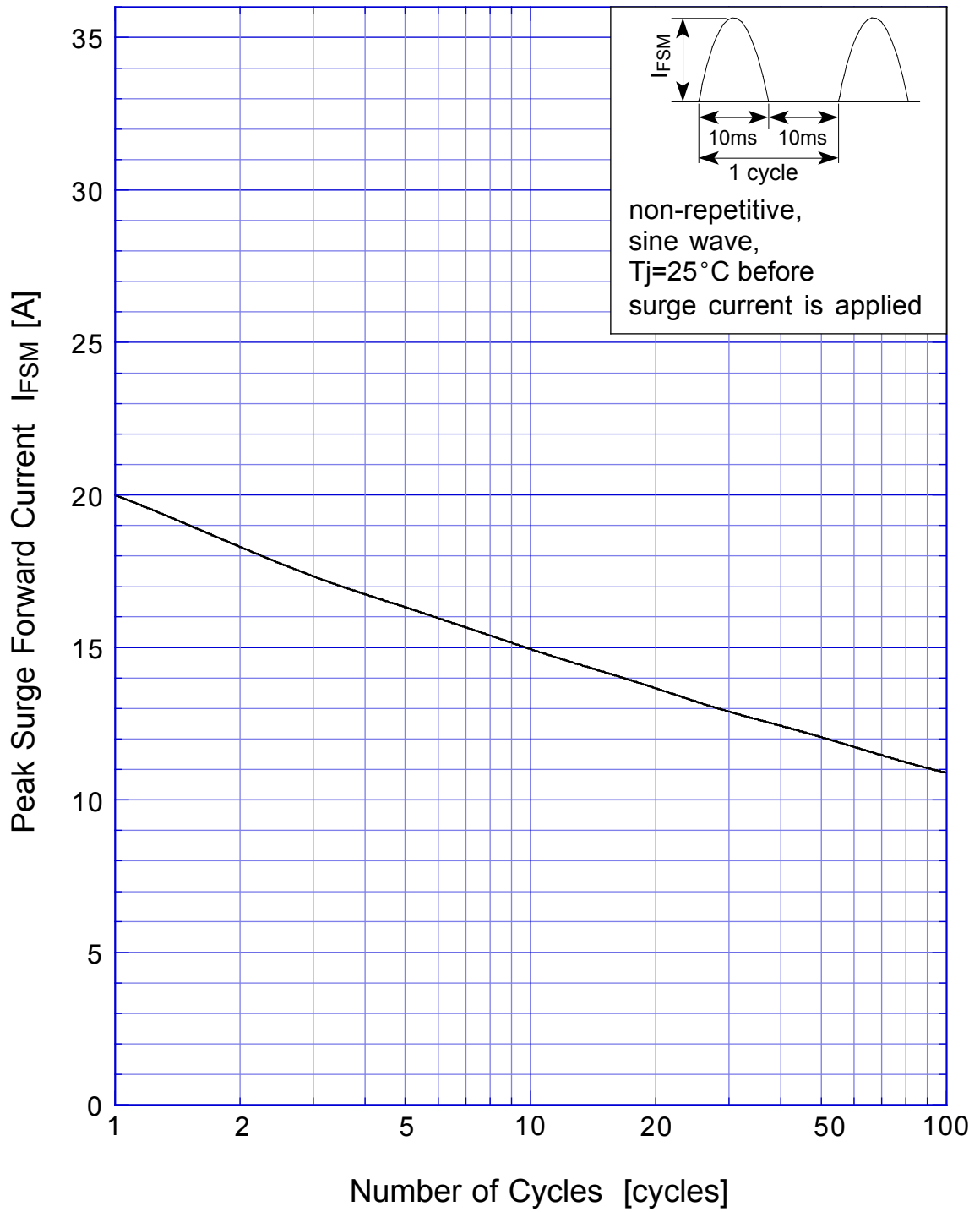


$$V_R = V_{RM}$$



D1FL20U

Peak Surge Forward Capability



D1FL20U Junction Capacitance

