

SHINDENGEN

Super Fast Recovery Rectifiers

Single

D1FL40

400V 0.8A

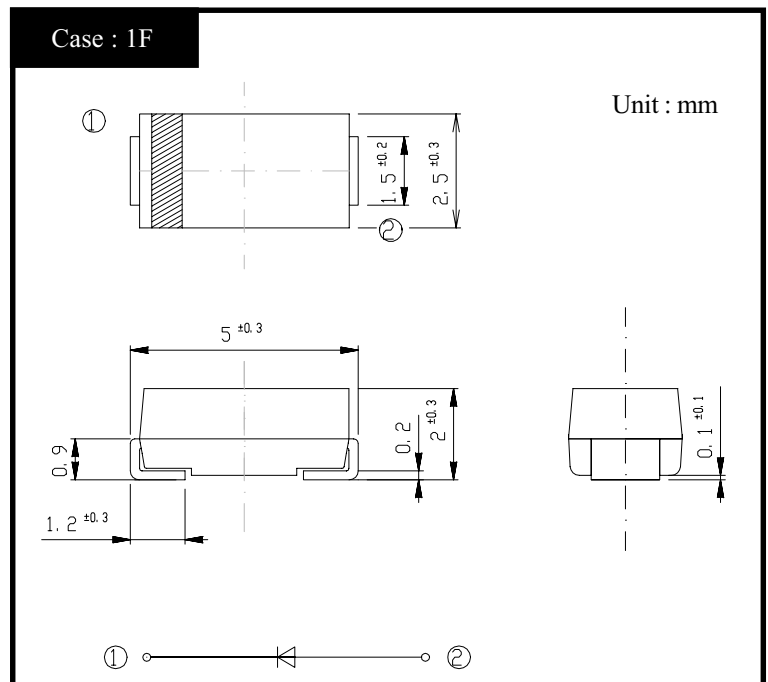
FEATURES

- Small SMT
- Low noise
- trr50ns

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)

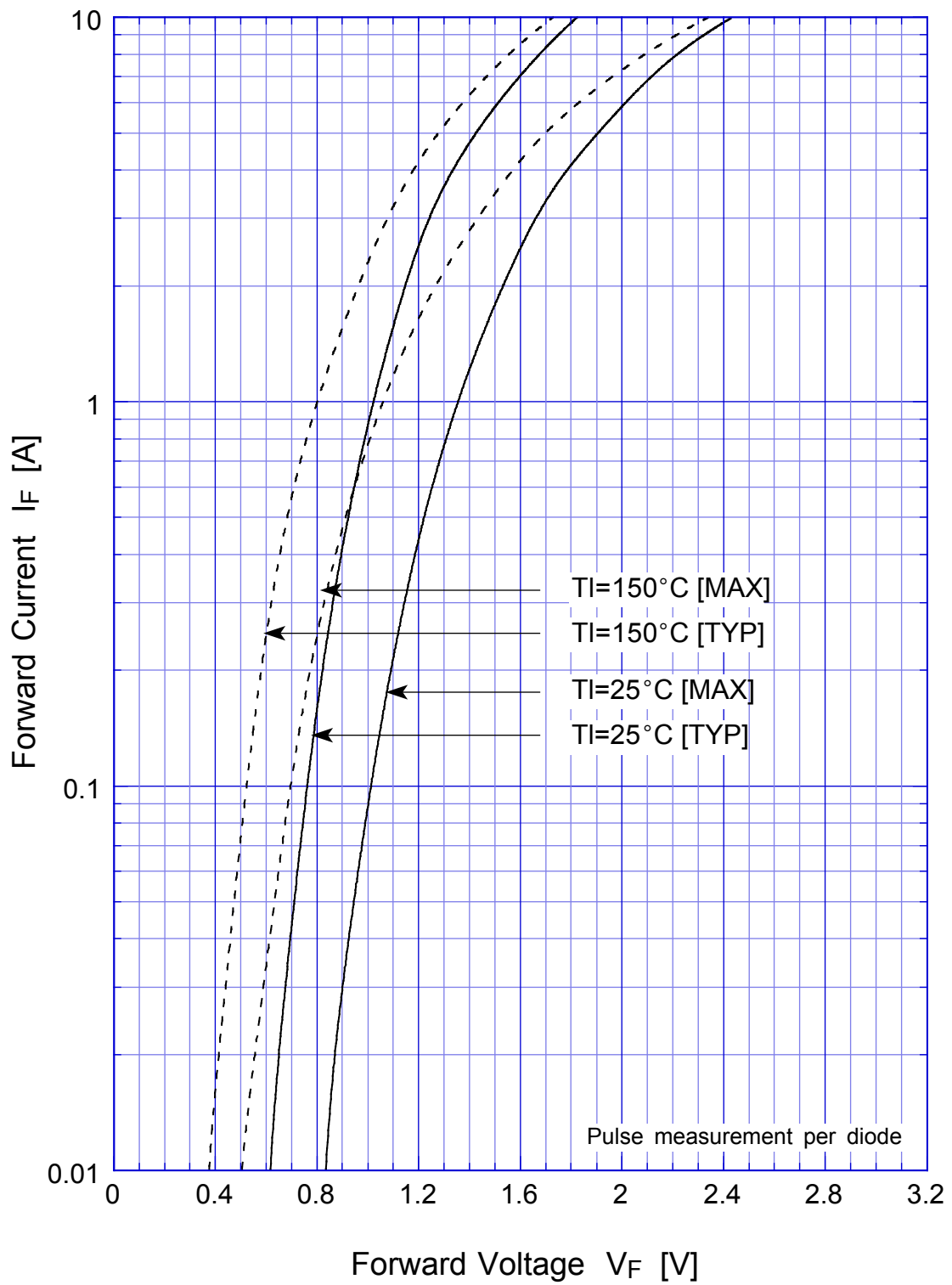
Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	T _{stg}		-55 to 150	°C
Operating Junction Temperature	T _j		150	°C
Maximum Reverse Voltage	V _{RM}		400	V
Average Rectified Forward Current	I _O	50Hz sine wave, R-load, T _a =25°C On alumina substrate	0.8	A
		50Hz sine wave, R-load, T _a =28°C On glass-epoxy substrate	0.6	
Peak Surge Forward Current	I _{FSM}	50Hz sine wave, Non-repetitive 1 cycle peak value, T _j =25°C	25	A

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

Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	V _F	I _F =0.8A, Pulse measurement	Max 1.3	V
Reverse Current	I _R	V _R =V _{RM} , Pulse measurement	Max 10	μA
Reverse Recovery Time	trr	I _F =0.5A, I _R =1A	Max 50	ns
Thermal Resistance	θ _{jl}	junction to lead	Max 23	°C/W
	θ _{ja}	junction to ambient, On alumina substrate	Max 108	
		junction to ambient, On glass-epoxy substrate	Max 157	

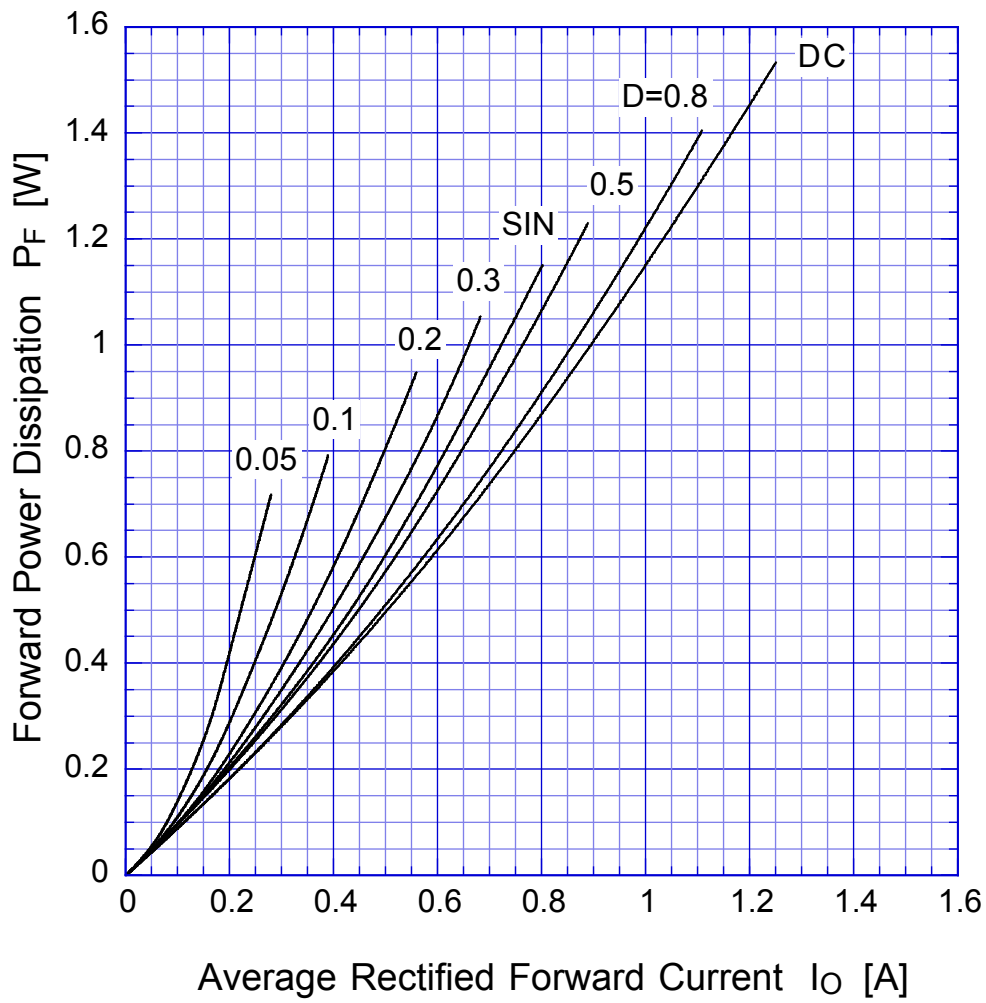
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Forward Voltage

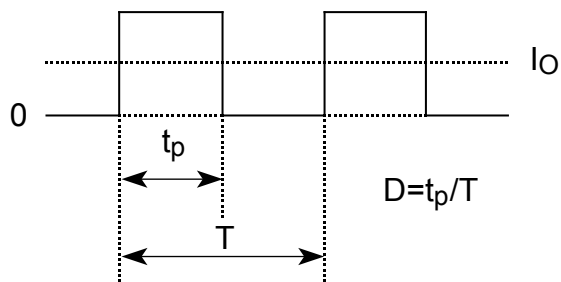


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Forward Power Dissipation

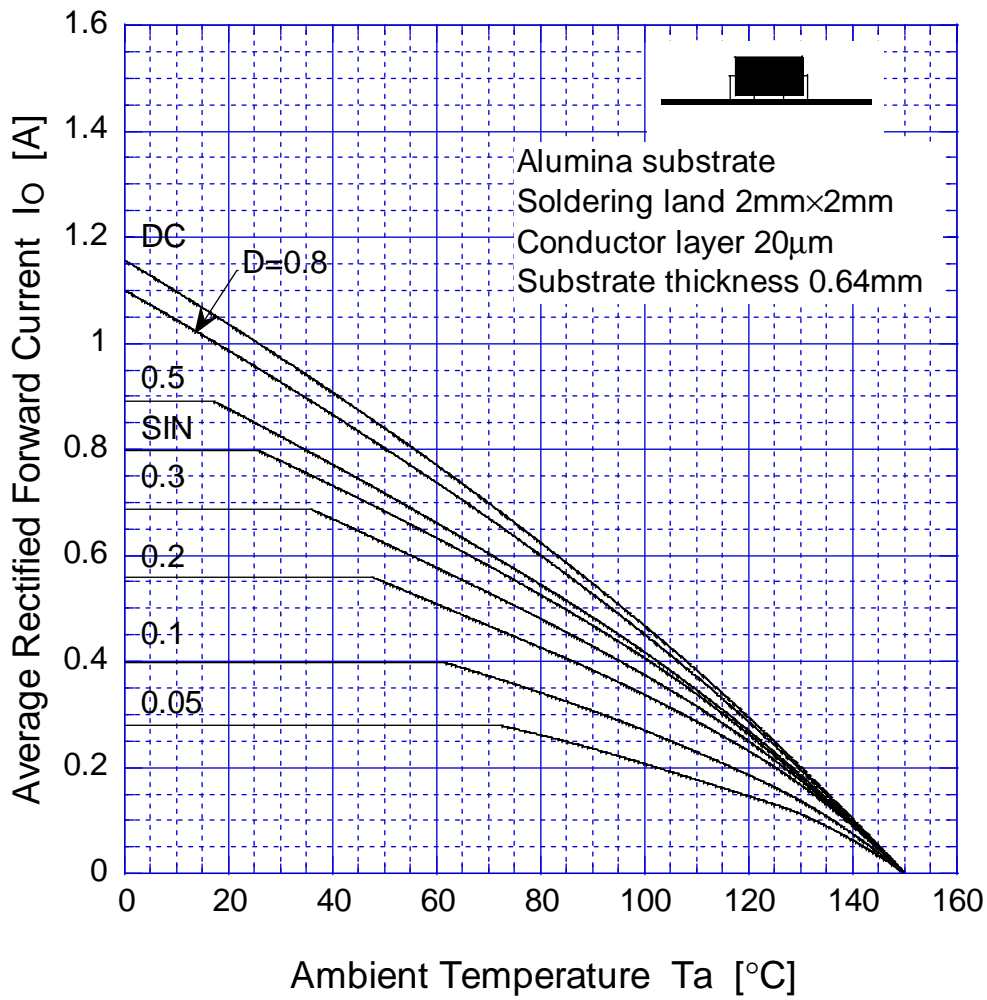


$T_j = T_{jmax}$

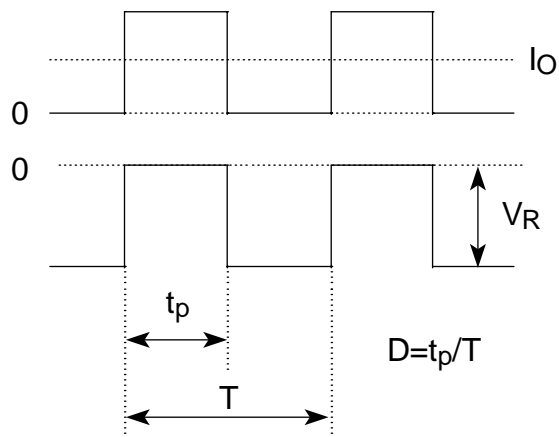


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Derating Curve

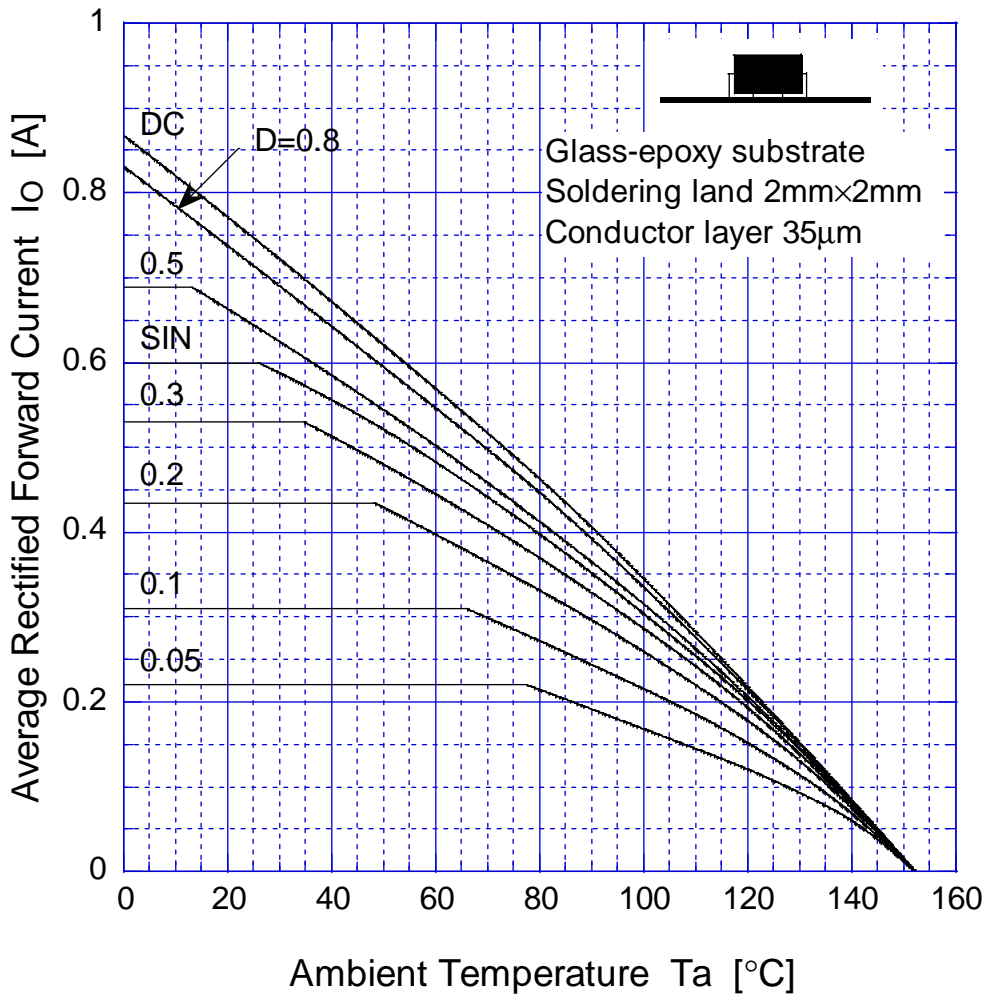


$$V_R = V_{RM}$$

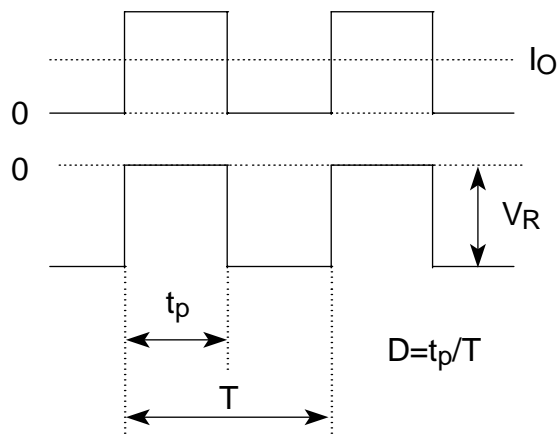


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Derating Curve

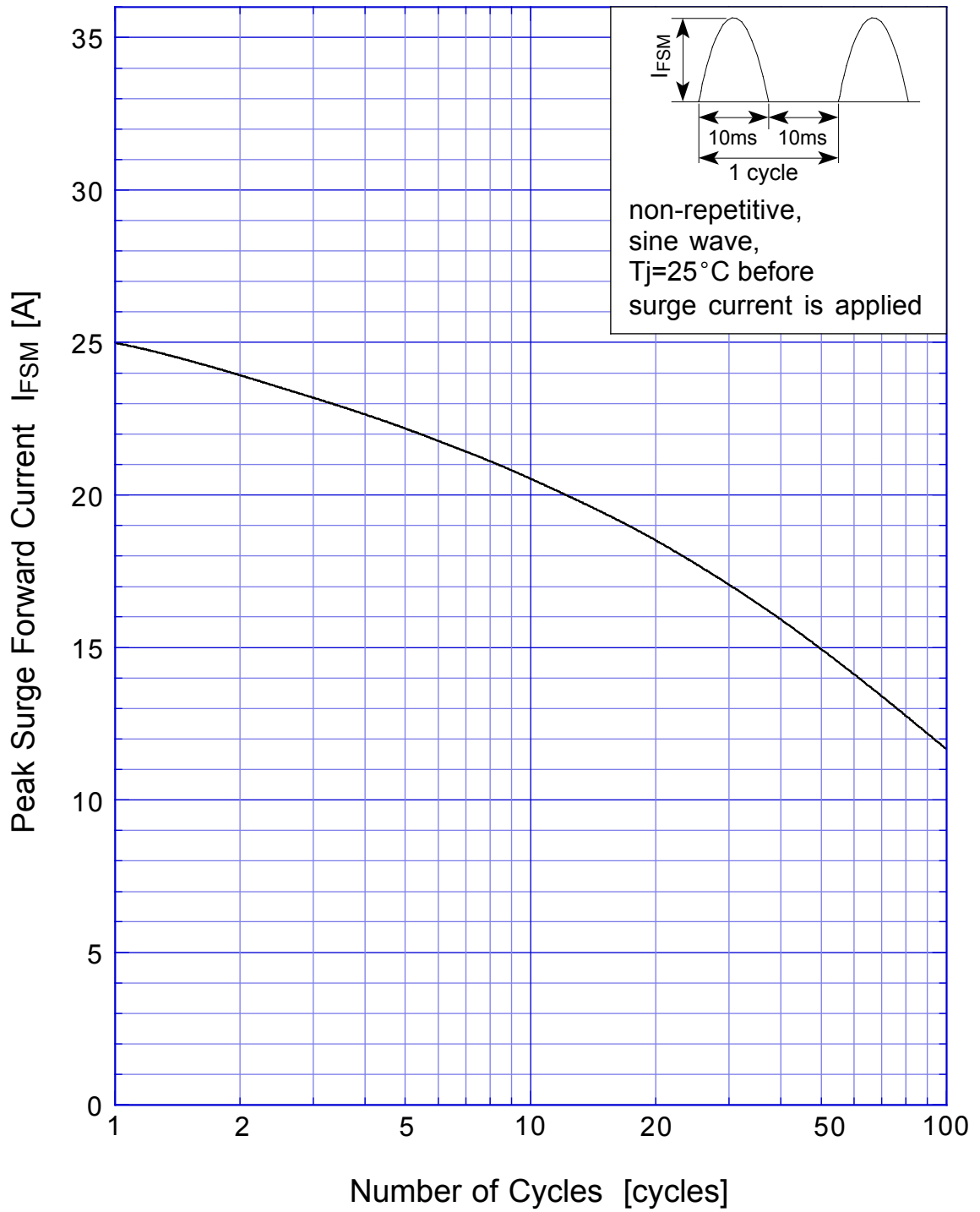


$$V_R = V_{RM}$$



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Peak Surge Forward Capability



D1FL40 Junction Capacitance

