

# SHINDENGEN

## Super Fast Recovery Rectifiers

Single

# D2FL40

## 400V 1.3A

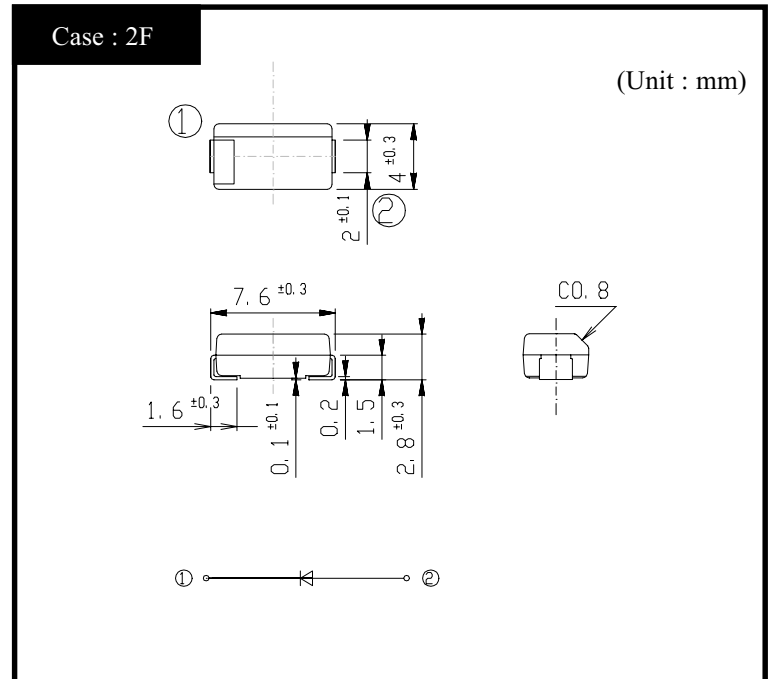
### FEATURES

- 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)

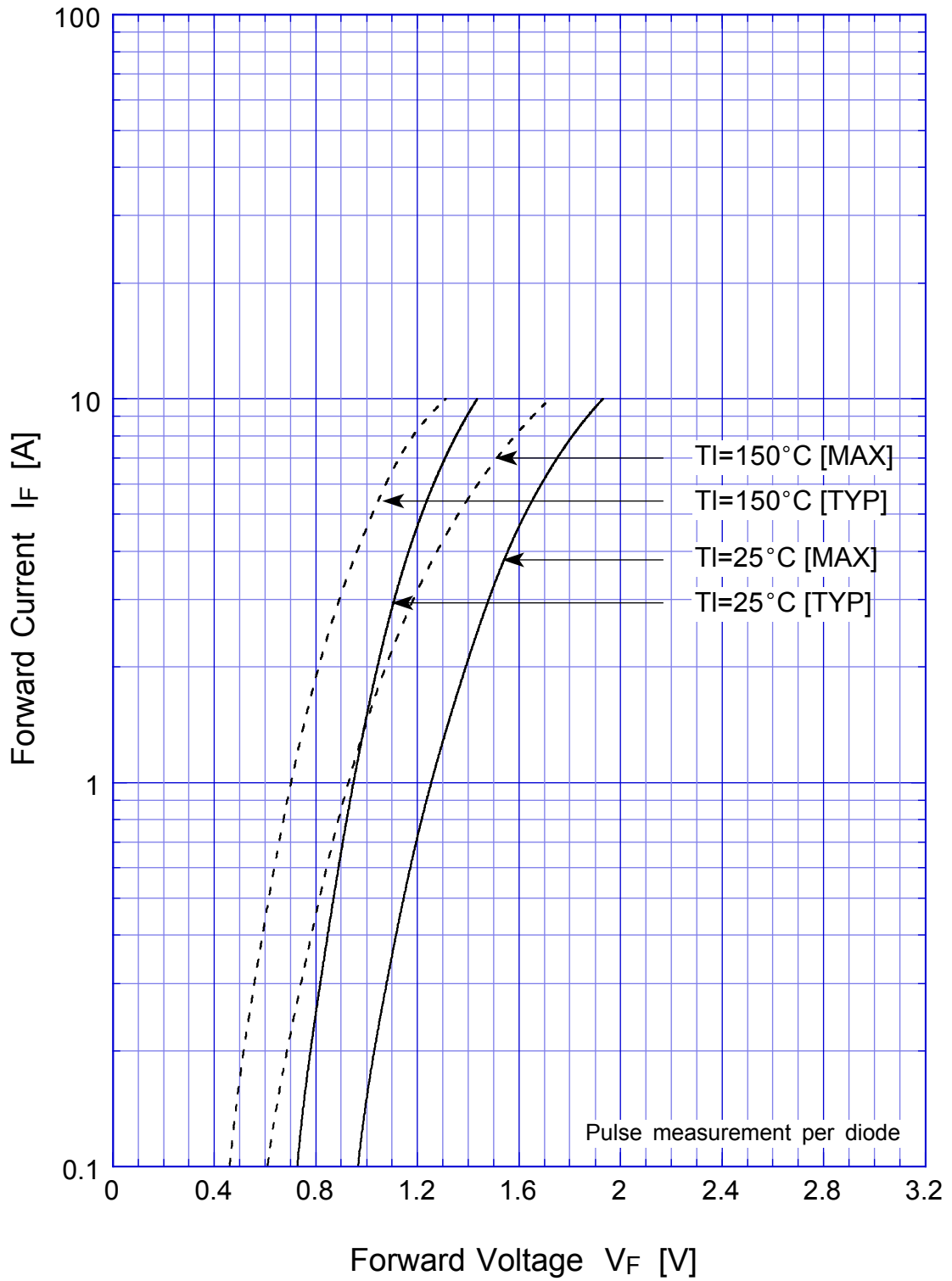
Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	T <sub>stg</sub>		-40~150	°C
Operating Junction Temperature	T <sub>j</sub>		150	°C
Maximum Reverse Voltage	V <sub>RM</sub>		400	V
Average Rectified Forward Current	I <sub>O</sub>	50Hz sine wave, R-load, T <sub>a</sub> =25°C On alumina substrate	1.3	A
		50Hz sine wave, R-load, T <sub>a</sub> =25°C On glass-epoxy substrate	1.05	
Peak Surge Forward Current	I <sub>FSM</sub>	50Hz sine wave, Non-repetitive 1 cycle peak value, T <sub>j</sub> =25°C	40	A

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

Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> =1.3A, Pulse measurement	Max.1.3	V
Reverse Current	I <sub>R</sub>	V <sub>R</sub> =V <sub>RM</sub> , Pulse measurement	Max.10	μA
Reverse Recovery Time	trr	I <sub>F</sub> =0.5A, I <sub>R</sub> =1A	Max.50	ns
Thermal Resistance	θ <sub>jl</sub>	junction to lead	Max.24	°C/W
	θ <sub>ja</sub>	junction to ambient, On alumina substrate	Max.90	
		junction to ambient, On glass-epoxy substrate	Max.120	

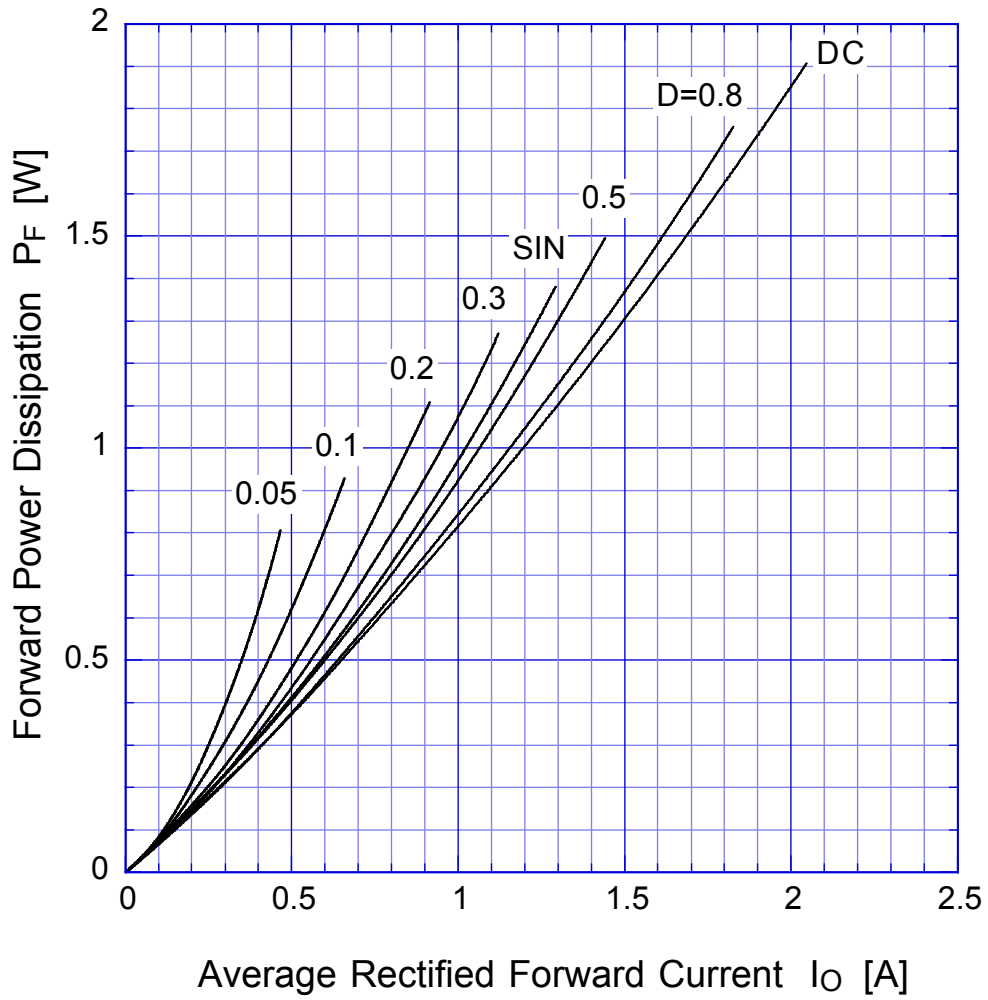
# D2FL40

# Forward Voltage

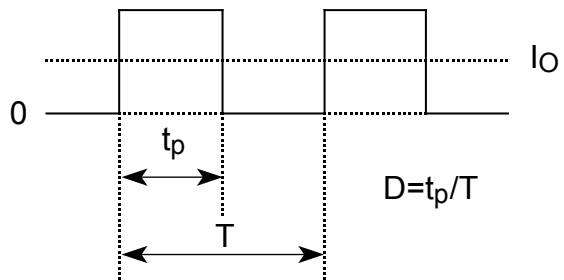


# D2FL40

## Forward Power Dissipation

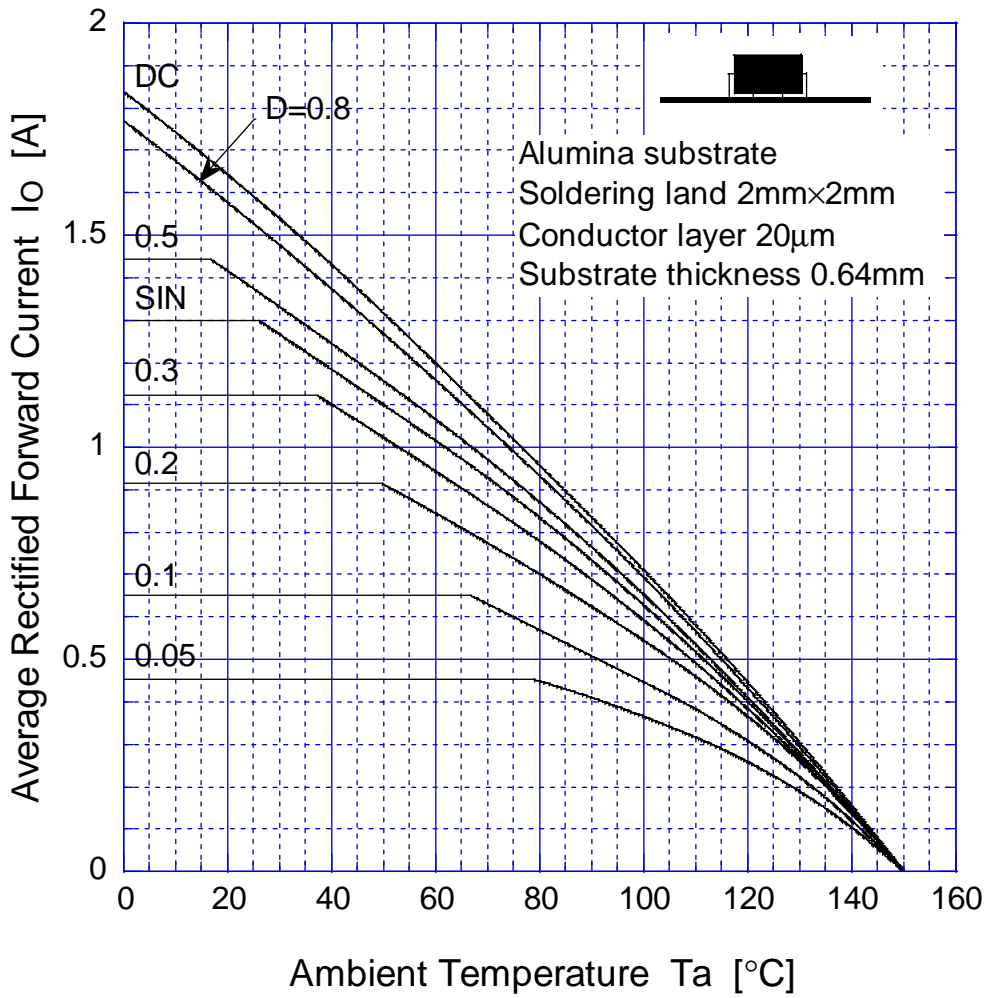


$T_j = T_{jmax}$

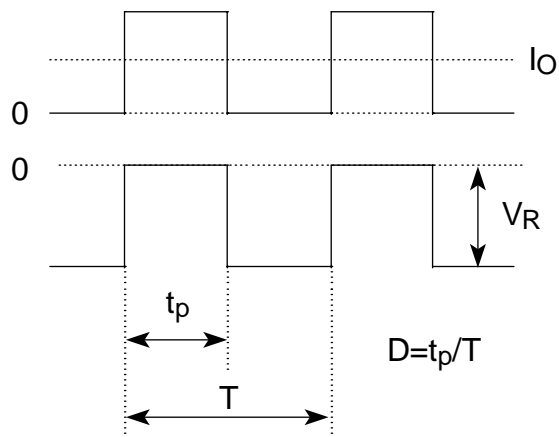


# D2FL40

# Derating Curve

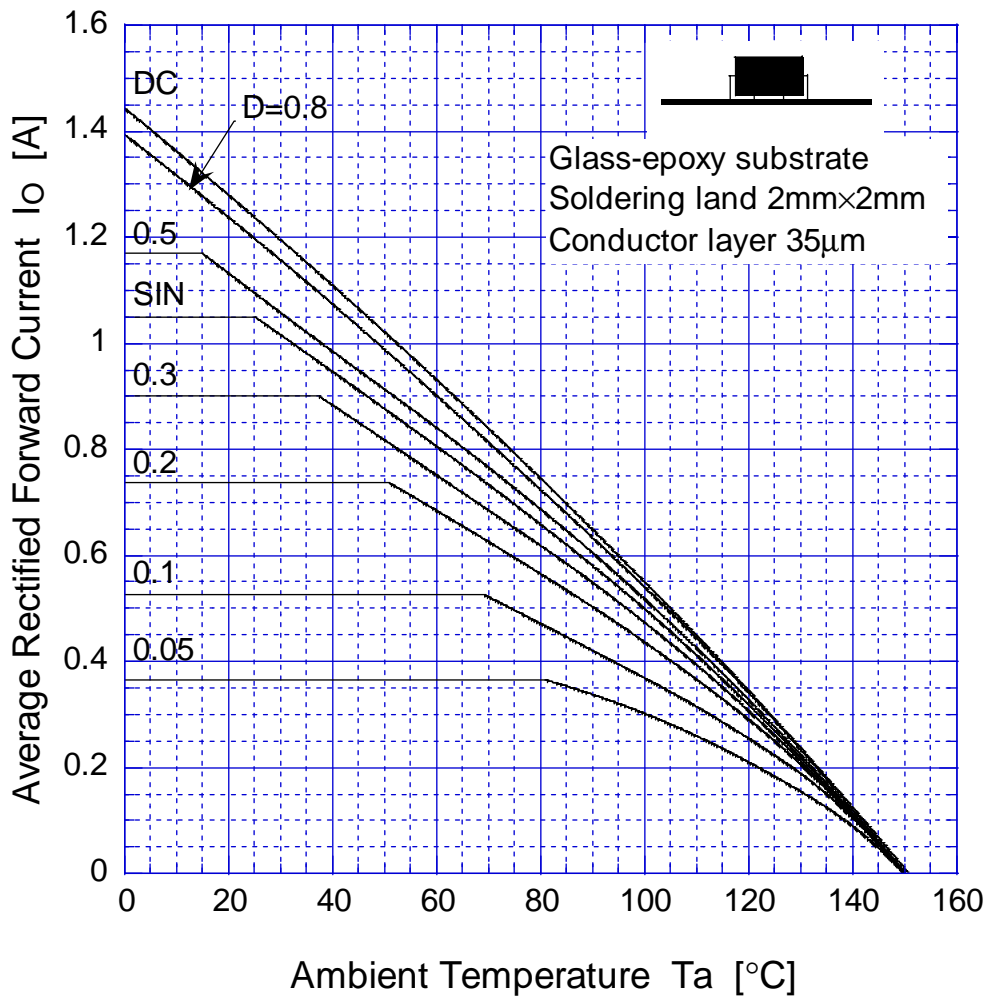


$$V_R = V_{RM}$$

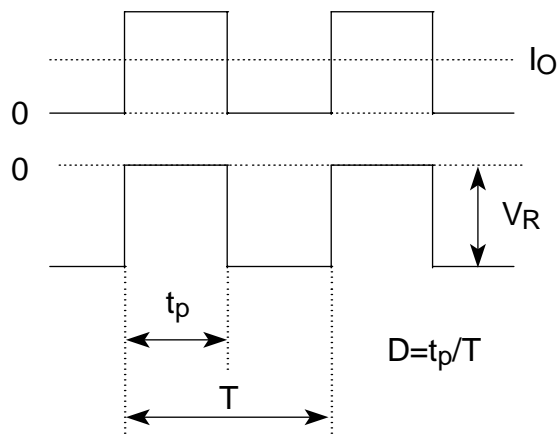


# D2FL40

# Derating Curve

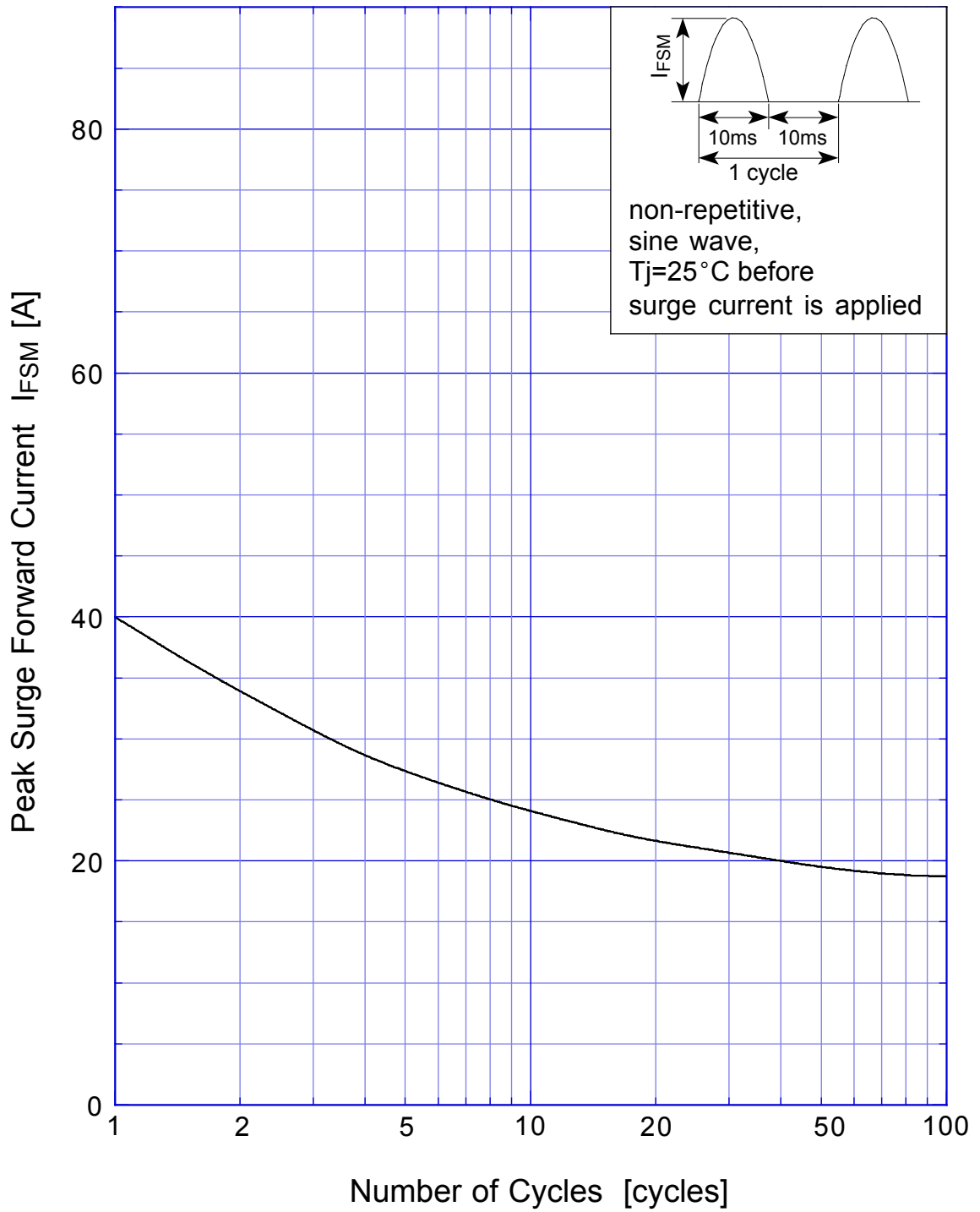


$$V_R = V_{RM}$$



# D2FL40

## Peak Surge Forward Capability



# D2FL40 Junction Capacitance

