

# SHINDENGEN

## Shottky Rectifiers (SBD)

Dual

# DF20JC10

## 100V 20A

### FEATURES

1. Low IR
2. Avoid thermal runaway
3. Available in the STO-220 lead type and surface mount type

### APPLICATION

1. Secondary rectifiers in notebook PC, LCD power supplies and adapter
2. Secondary rectifiers in power supplies
3. DC/DC converter
4. Prevent reverse current of redundant power supplies

### RATINGS

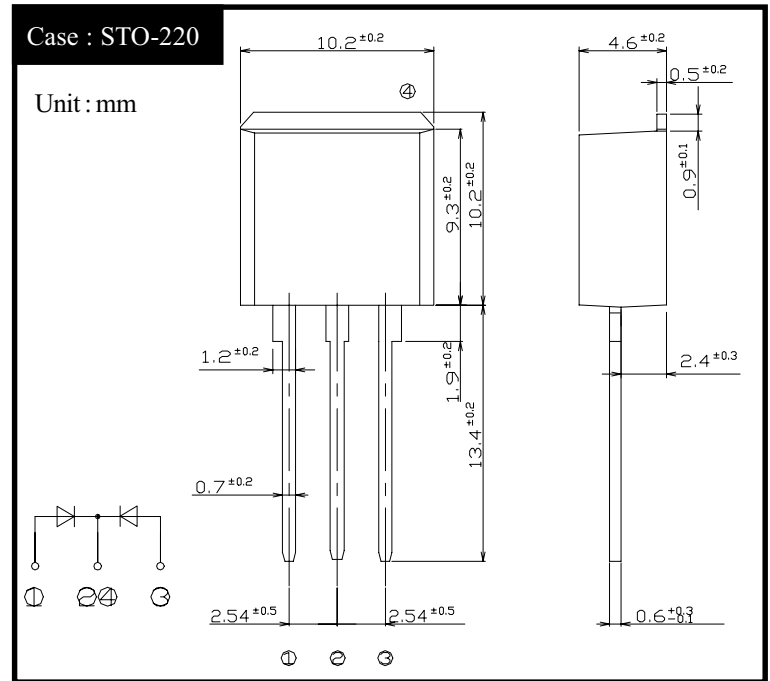
#### ● Absolute Maximum Ratings ( If not specified, Tc=25°C)

Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	Tstg		-55~150	°C
Operating Junction Temperature	Tj		150	°C
Maximum Reverse Voltage	V <sub>RM</sub>		100	V
Average Rectified Forward Current	I <sub>O</sub>	50Hz sine wave, R-load, Rating for each diode I <sub>o</sub> /2, Tc=121°C	20	A
Peak Surge Forward Current	I <sub>FSM</sub>	50Hz sine wave, Non-repetitive 1cycle peak value, Tj=25°C	200	A

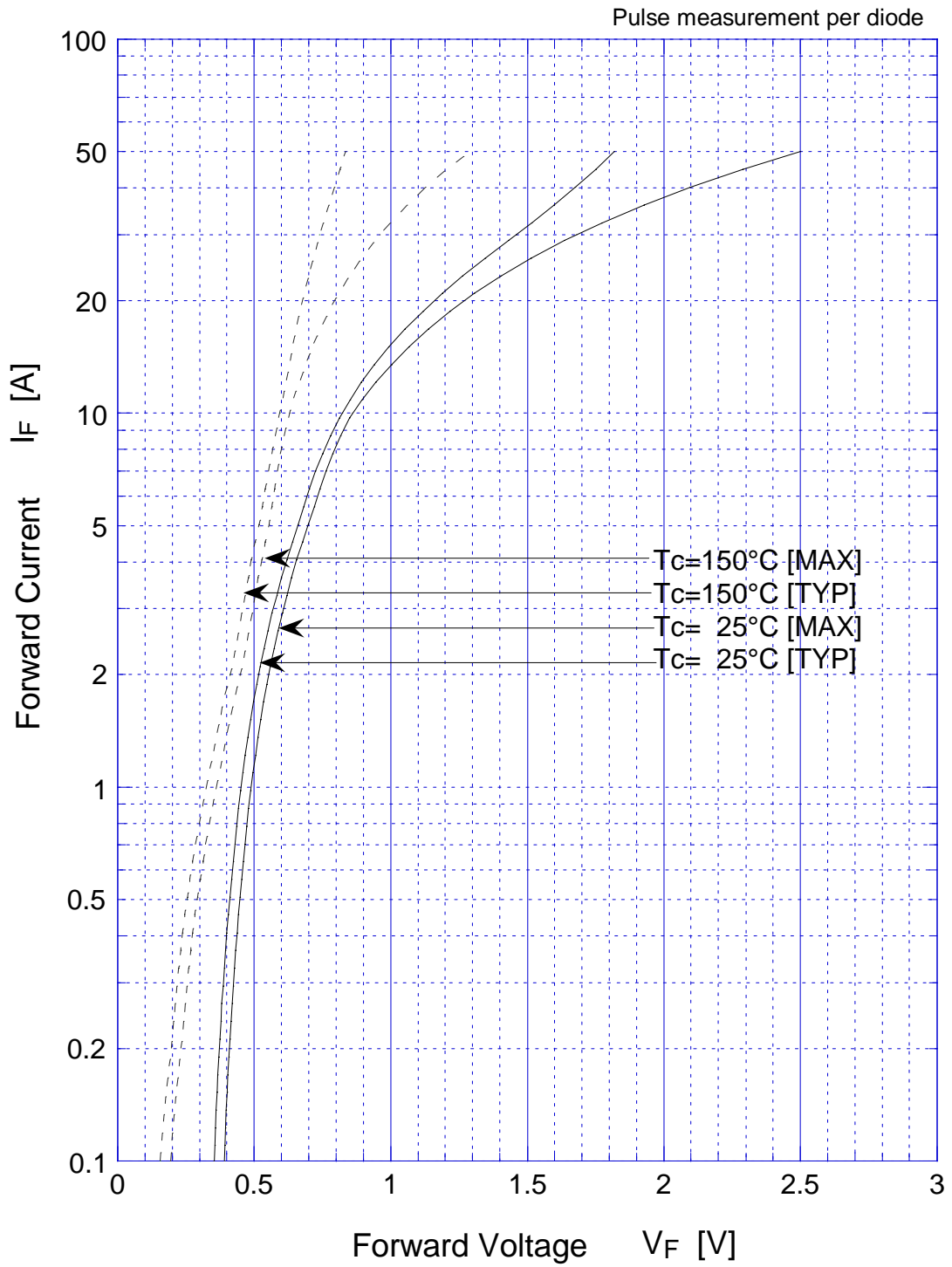
#### ● Electrical Characteristics ( If not specified, Tc=25°C)

Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> =10A, Pulse measurement, Rating of per diode	Max 0.86	V
Reverse Current	I <sub>R</sub>	V <sub>R</sub> =V <sub>RM</sub> , Pulse measurement, Rating of per diode	Max 0.7	mA
Junction Capacitance	C <sub>j</sub>	f = 1MHz, V <sub>R</sub> = 10V	TYP 260	pF
Thermal Resistance	θ <sub>jc</sub>	junction to case	Max 1.6	°C/W

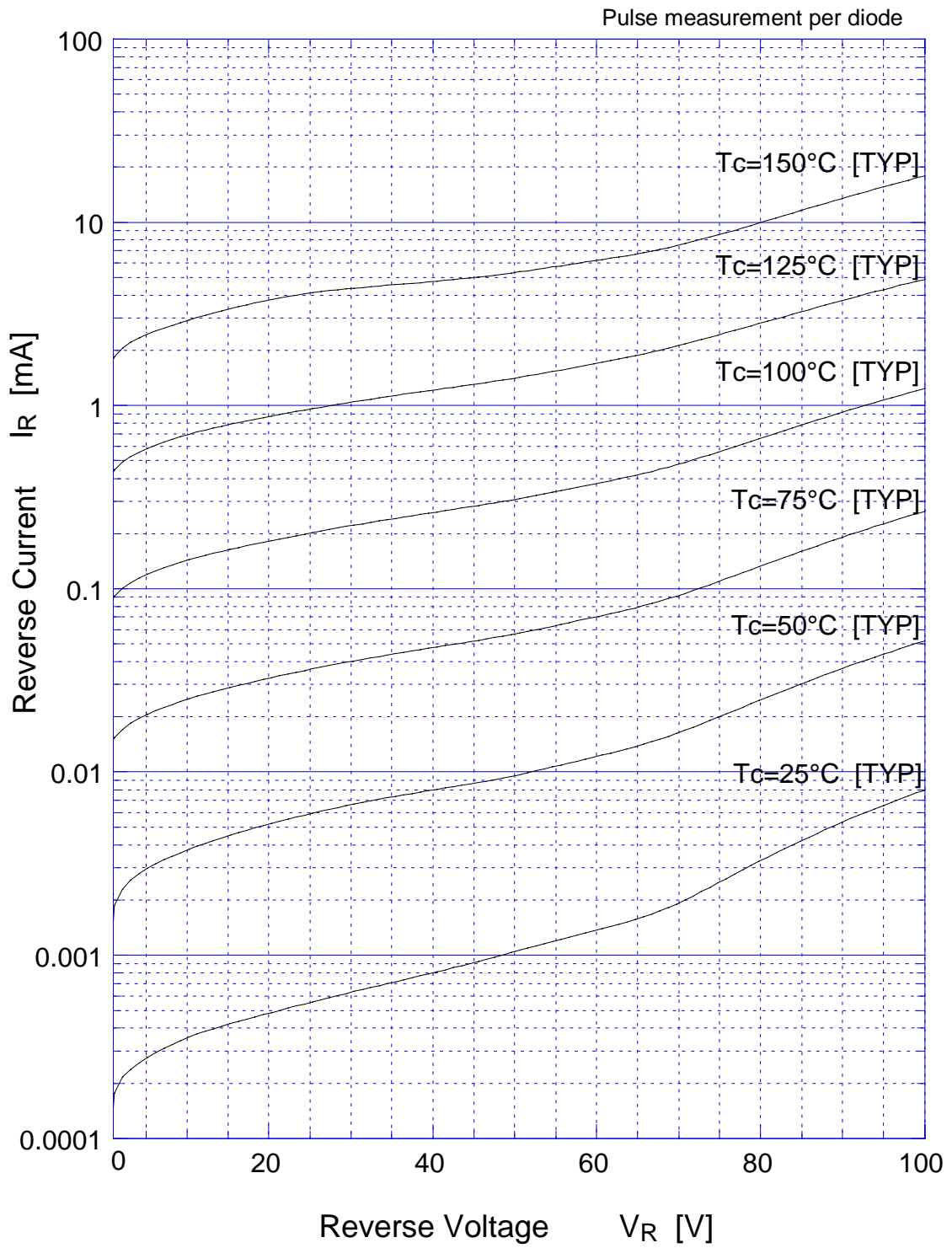
### OUTLINE DIMENSIONS



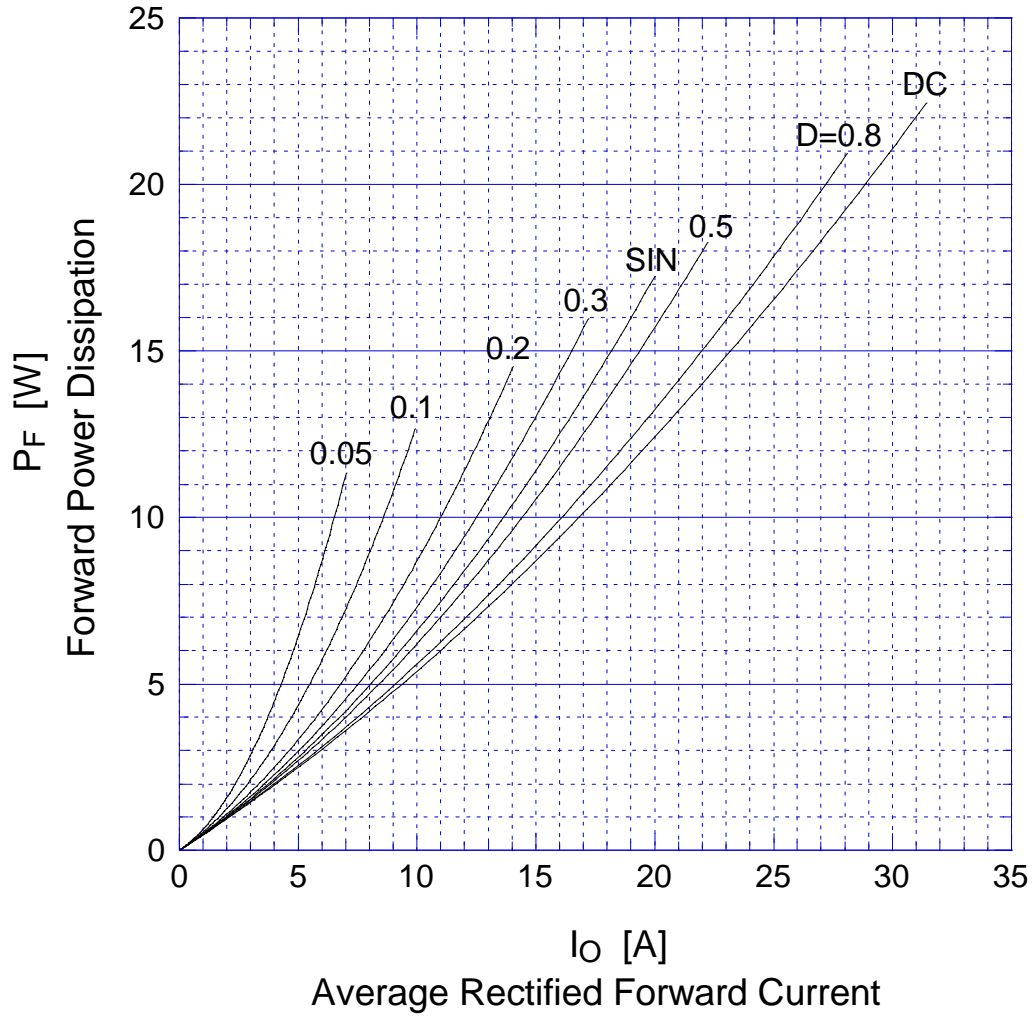
# DF20JC10 Forward Voltage



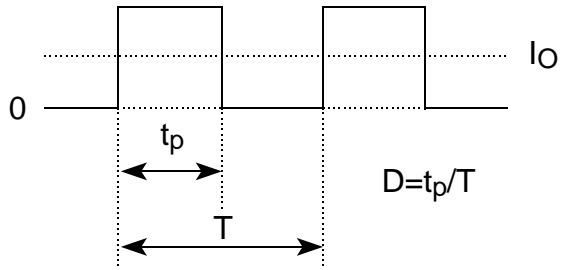
# DF20JC10 Reverse Current



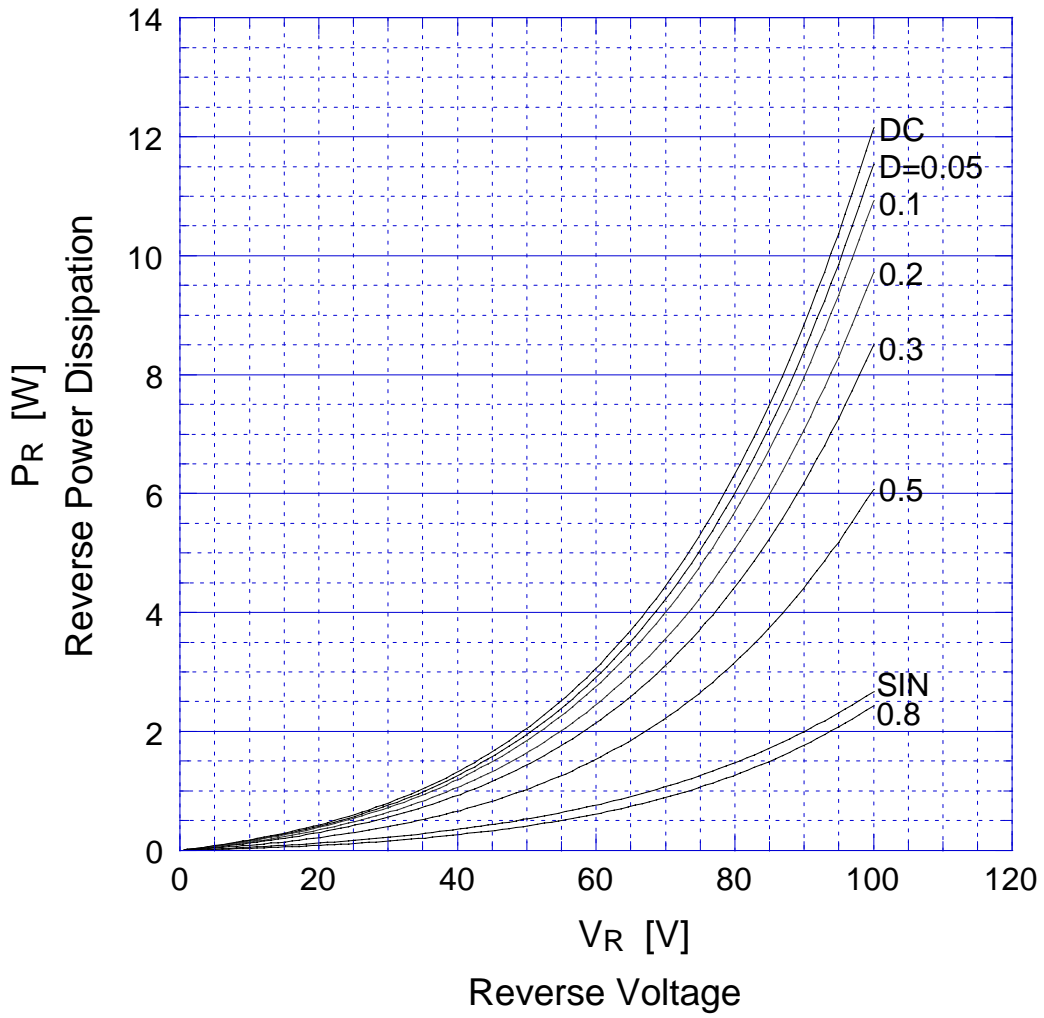
# DF20JC10 Forward Power Dissipation



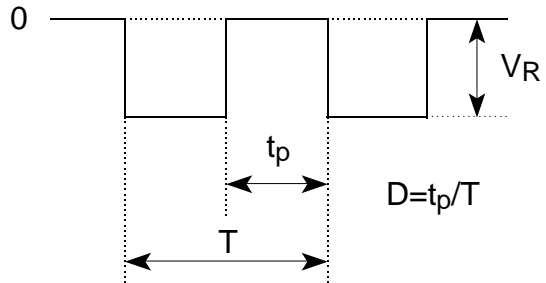
$T_j = 150^\circ\text{C}$



# DF20JC10 Reverse Power Dissipation

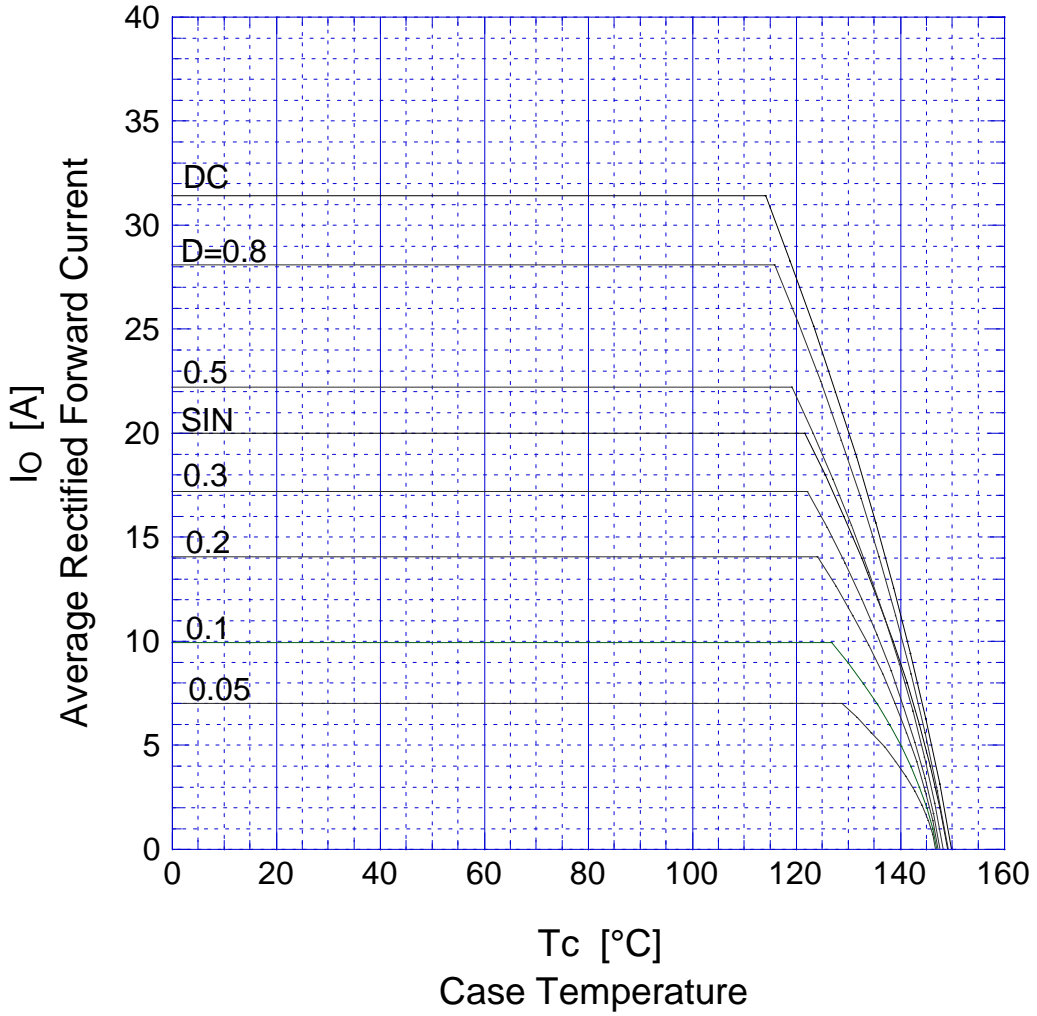


$T_j = 150^\circ\text{C}$

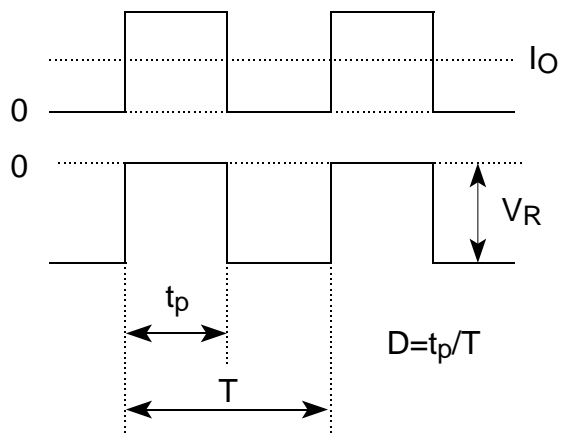


# DF20JC10

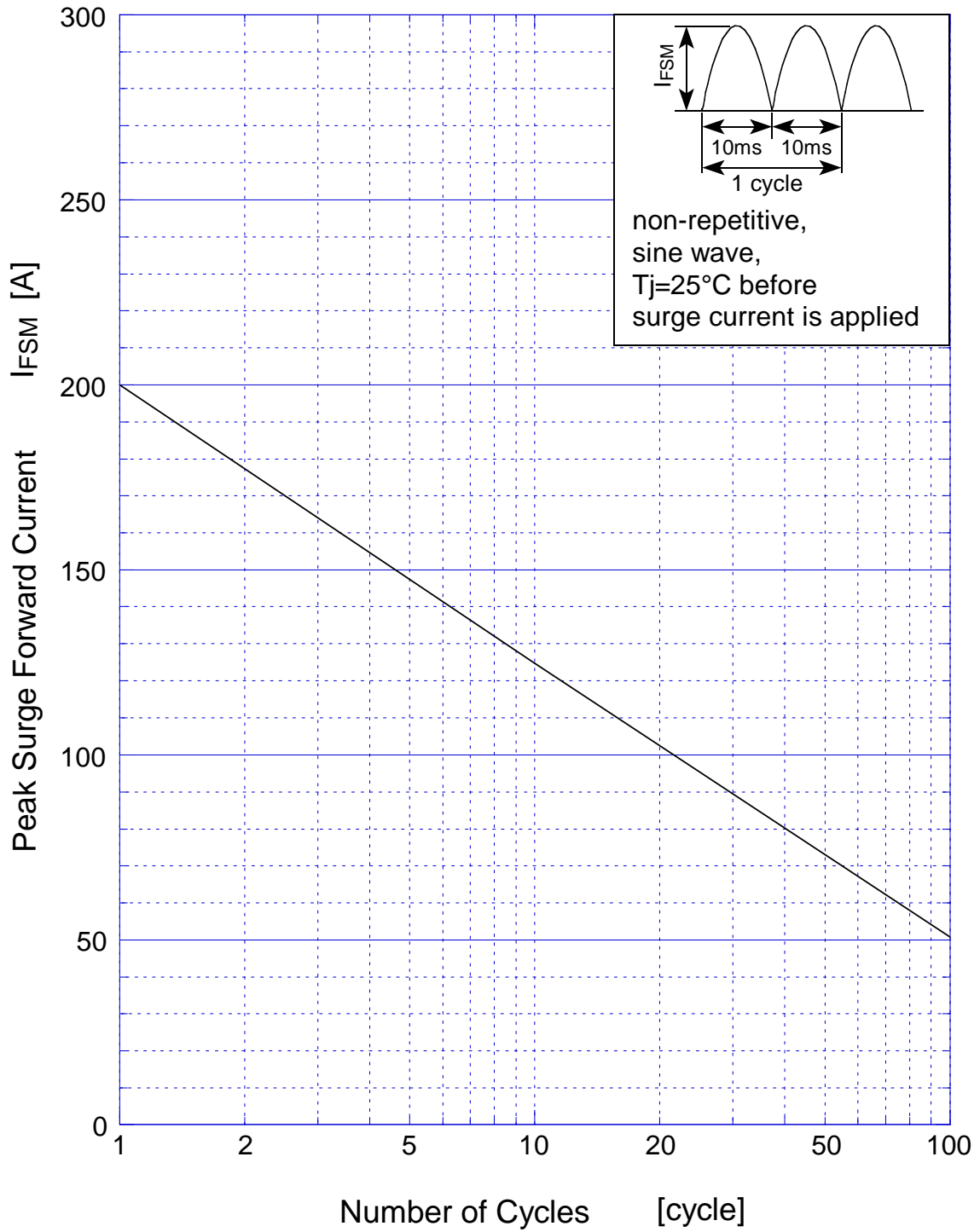
# Derating Curve



$V_R = 50V$



# DF20JC10 Peak Surge Forward Capability



# DF20JC10 Junction Capacitance

