

SHINDENGEN

Shottky Rectifiers (SBD)

Dual

DF20JC10

100V 20A

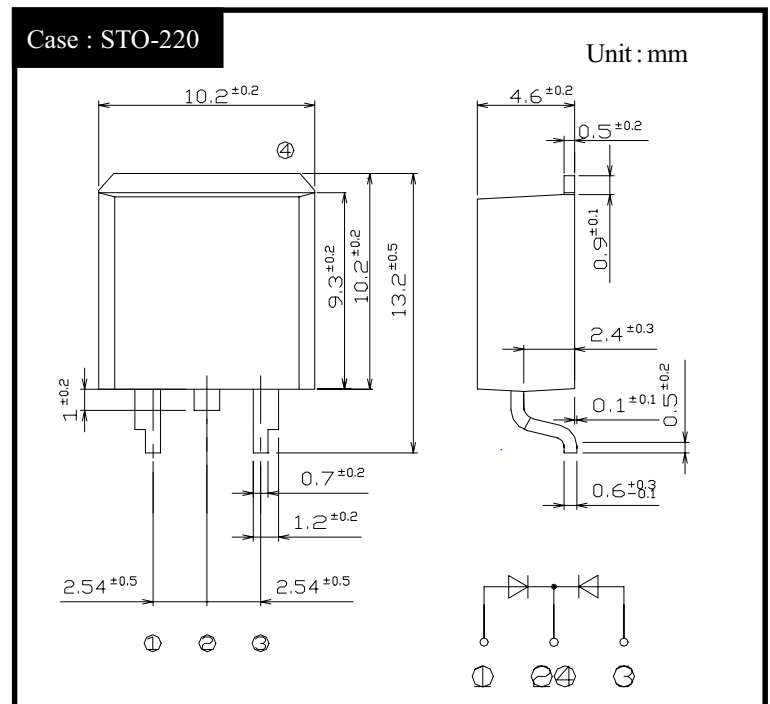
FEATURES

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

OUTLINE DIMENSIONS



RATINGS

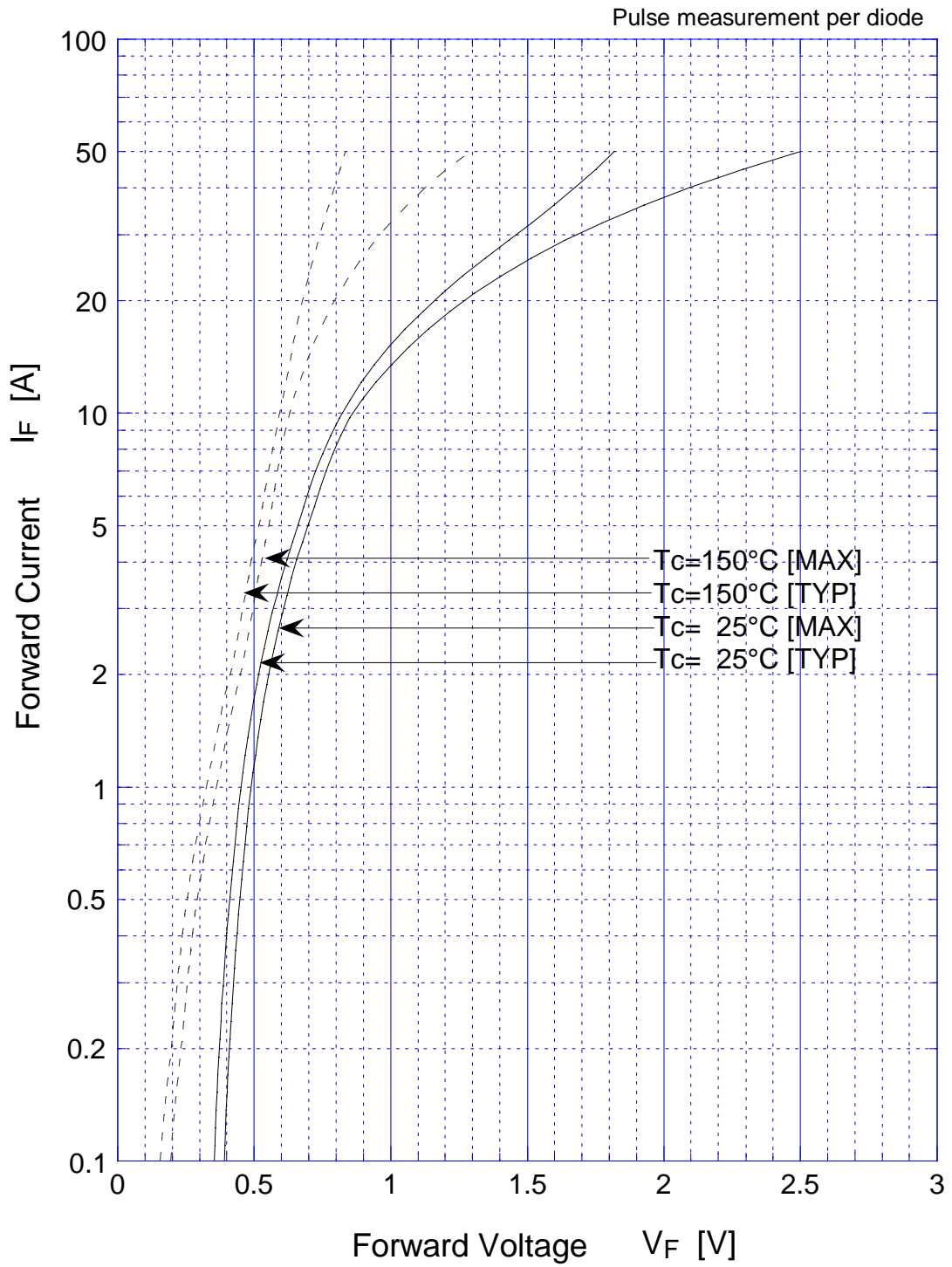
● Absolute Maximum Ratings (If not specified, Tc=25°C)

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

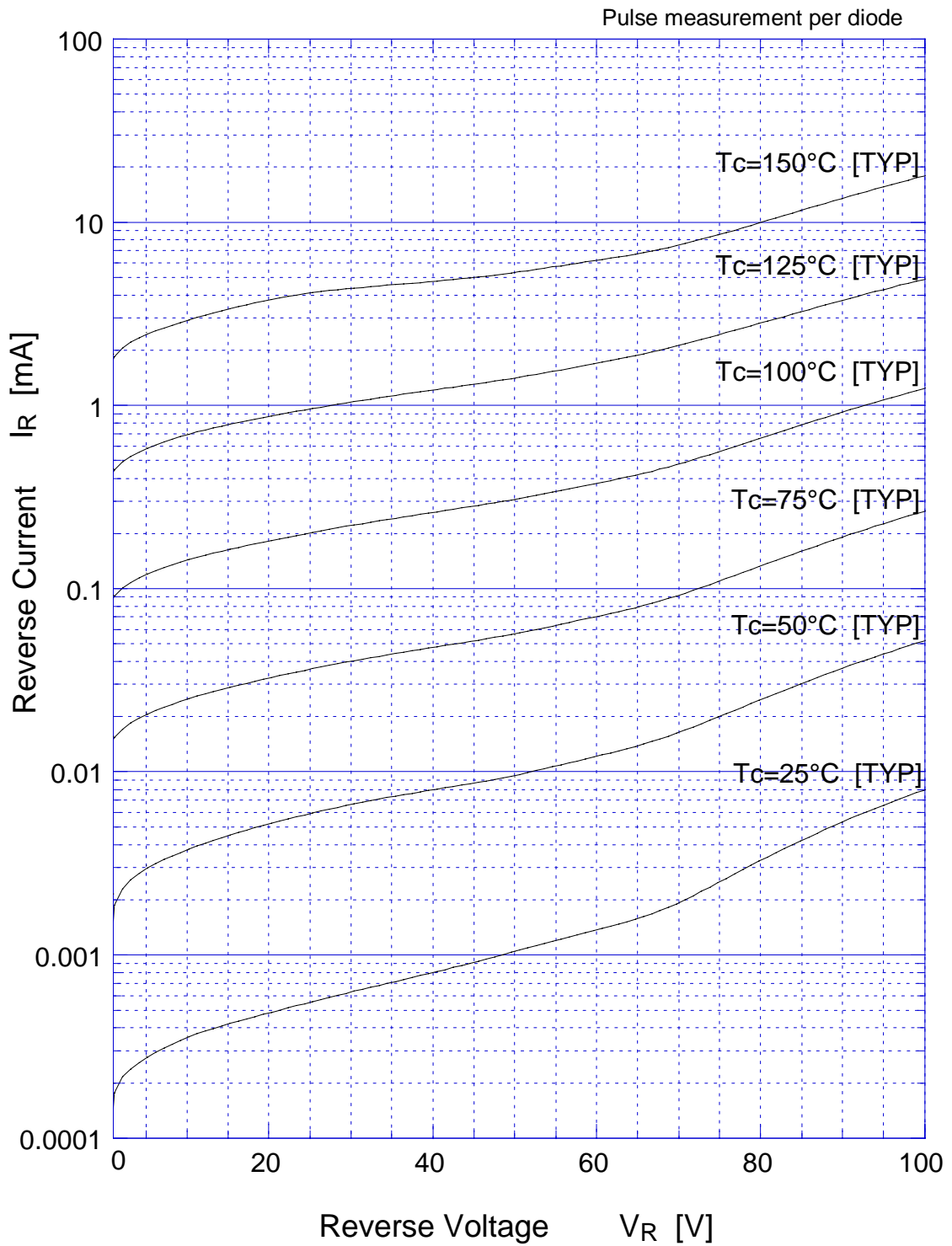
● Electrical Characteristics (If not specified, Tc=25°C)

Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	V _F	I _F =10A, Pulse measurement, Rating of per diode	Max 0.86	V
Reverse Current	I _R	V _R =V _{RM} , Pulse measurement, Rating of per diode	Max 0.7	mA
Junction Capacitance	C _j	f = 1MHz, V _R = 10V	TYP 260	pF
Thermal Resistance	θ _{jc}	junction to case	Max 1.6	°C/W

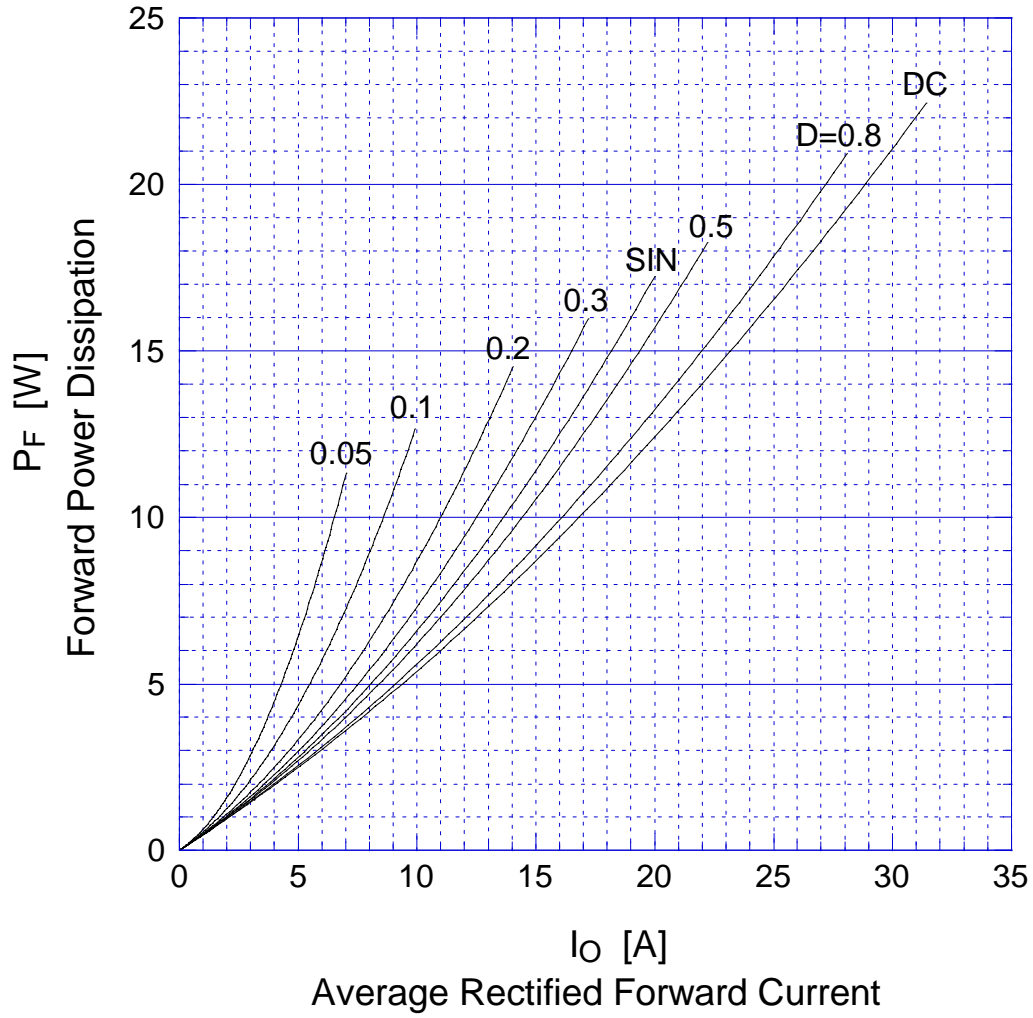
DF20JC10 Forward Voltage



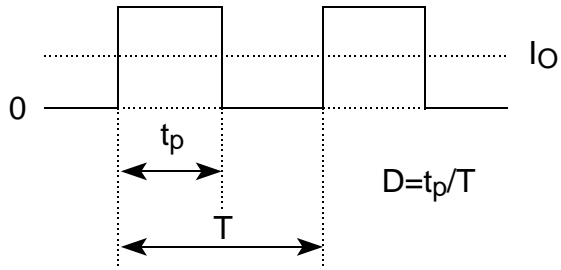
DF20JC10 Reverse Current



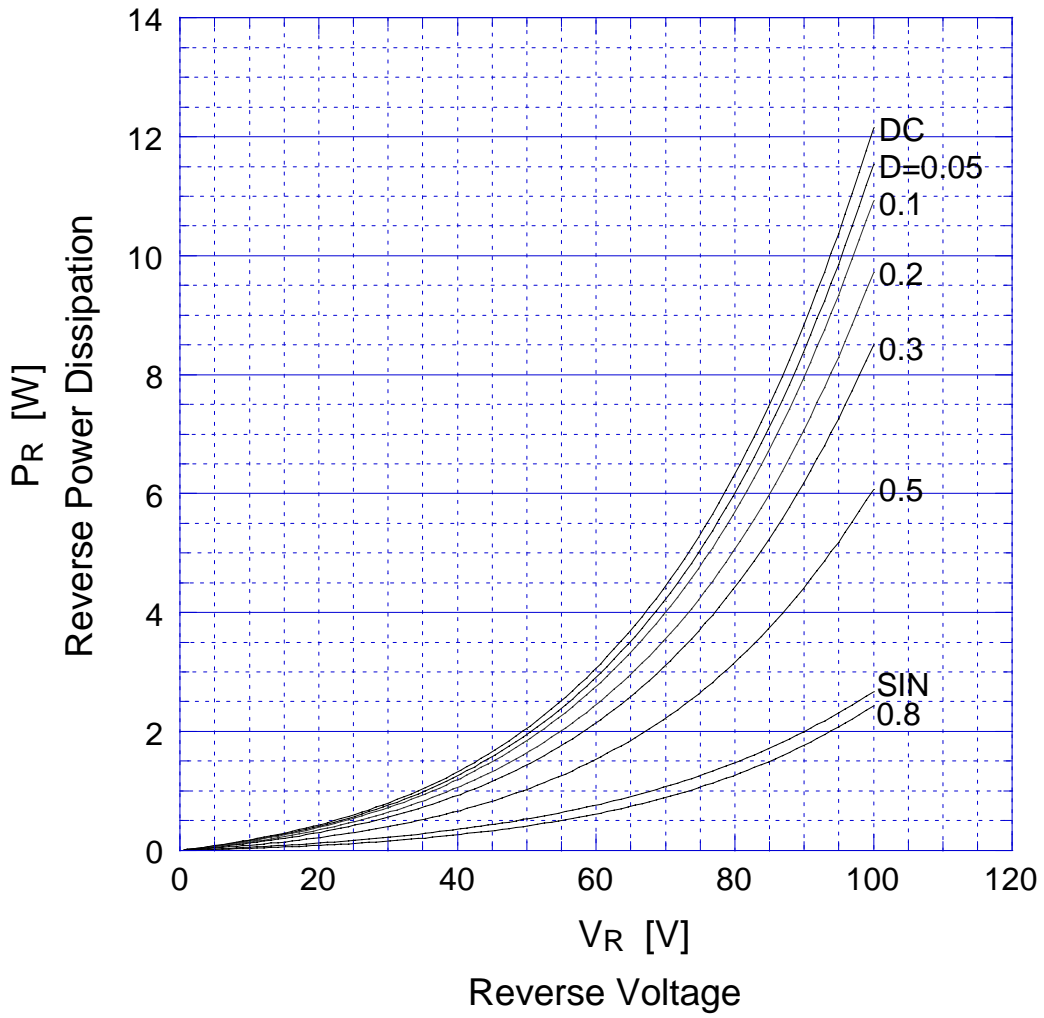
DF20JC10 Forward Power Dissipation



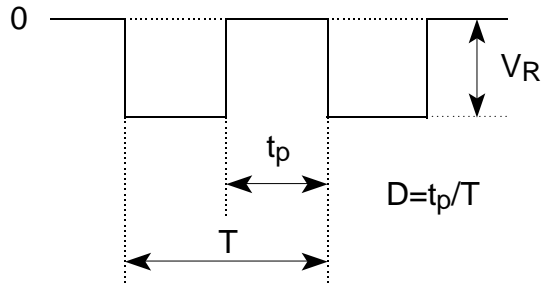
$T_j = 150^\circ\text{C}$



DF20JC10 Reverse Power Dissipation

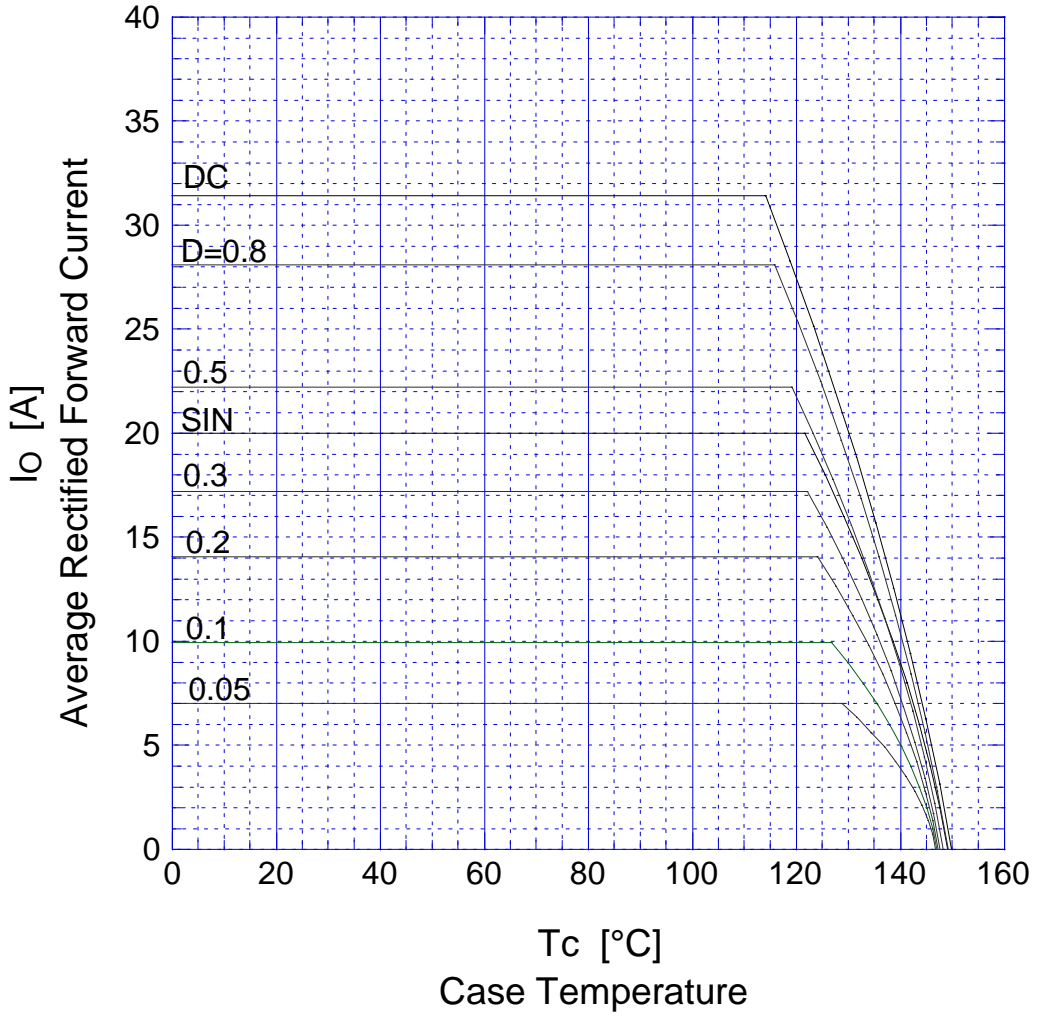


$T_j = 150^\circ\text{C}$

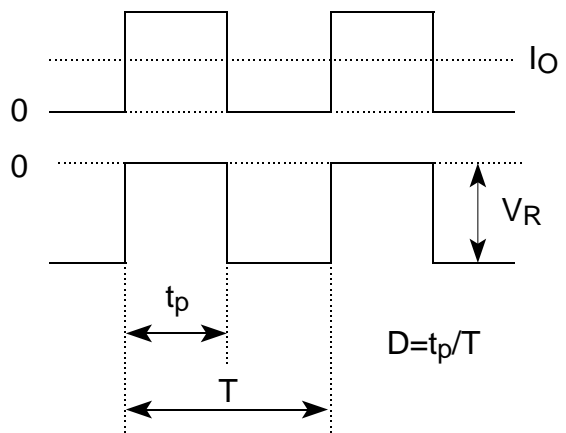


DF20JC10

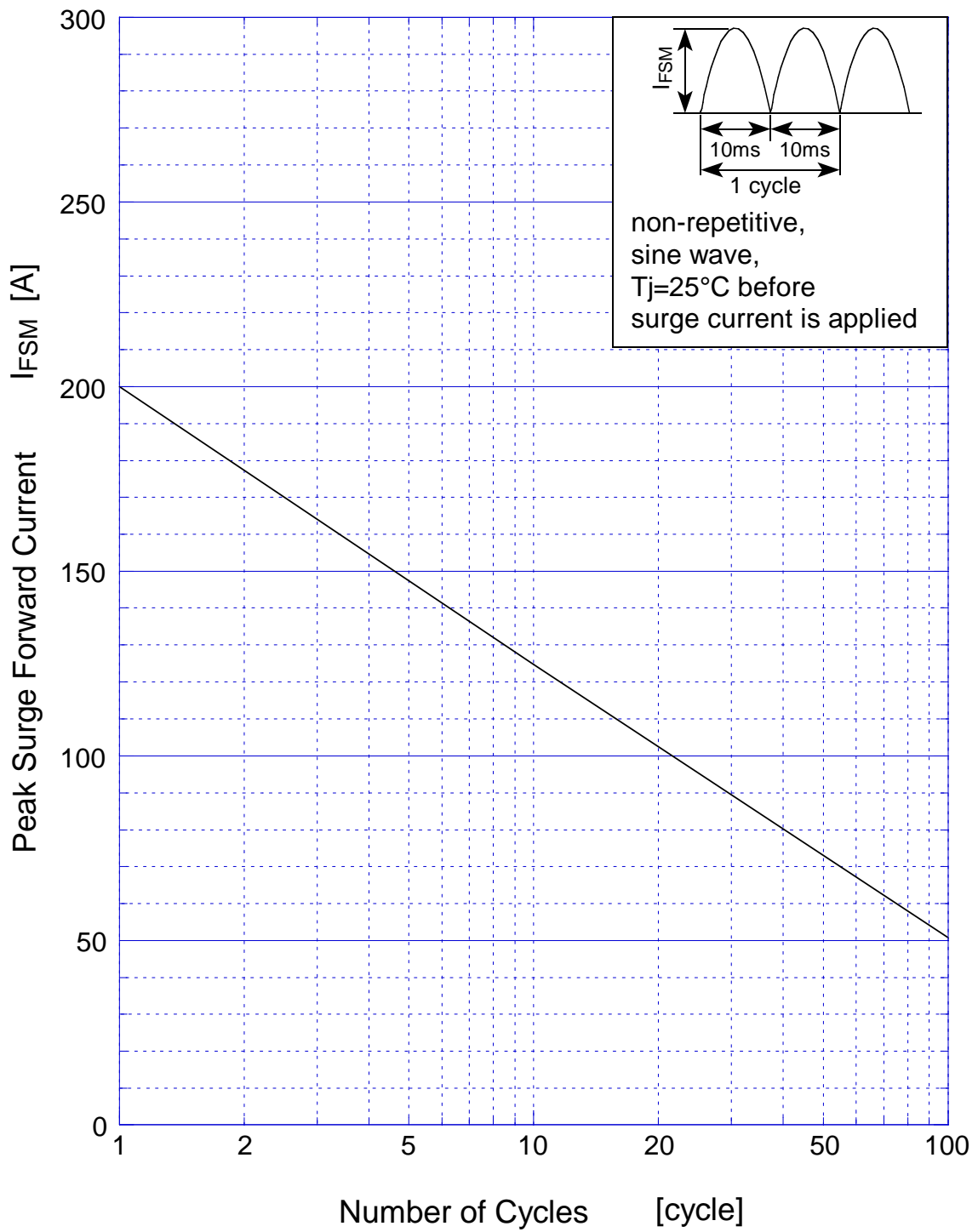
Derating Curve



$V_R = 50V$



DF20JC10 Peak Surge Forward Capability



DF20JC10 Junction Capacitance

