

DF30JC10

100V 30A

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

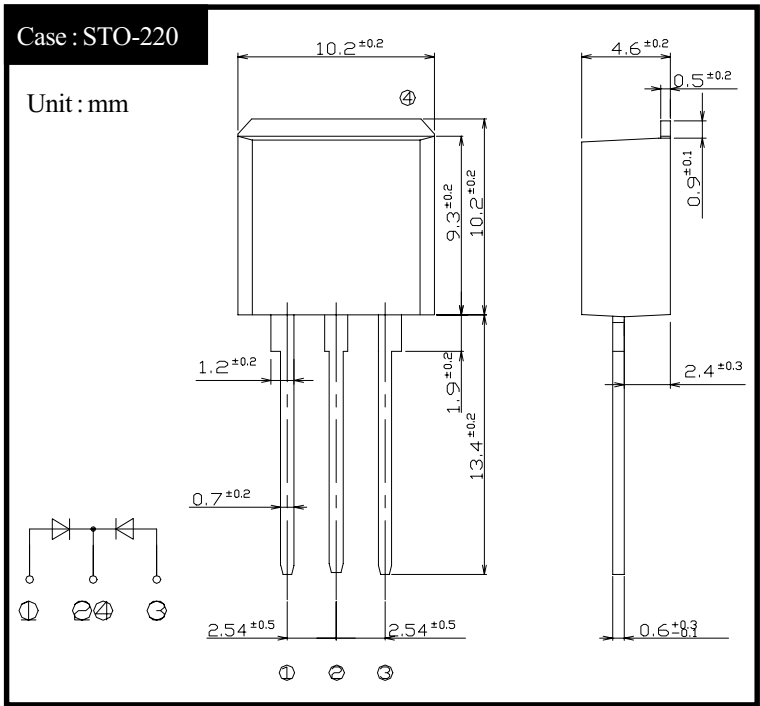
●Absolute Maximum Ratings (If not specified, Tc=25°C)

Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	Tstg		-55~150	°C
Operating Junction Temperature	Tj		150	°C
Maximum Reverse Voltage	V _{RM}		100	V
Average Rectified Forward Current	I _O	50Hz sine wave, R-load, Rating for each diode I _o /2, Tc=116°C	30	A
Peak Surge Forward Current	I _{FSM}	50Hz sine wave, Non-repetitive 1cycle peak value, Tj=25°C	300	A

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

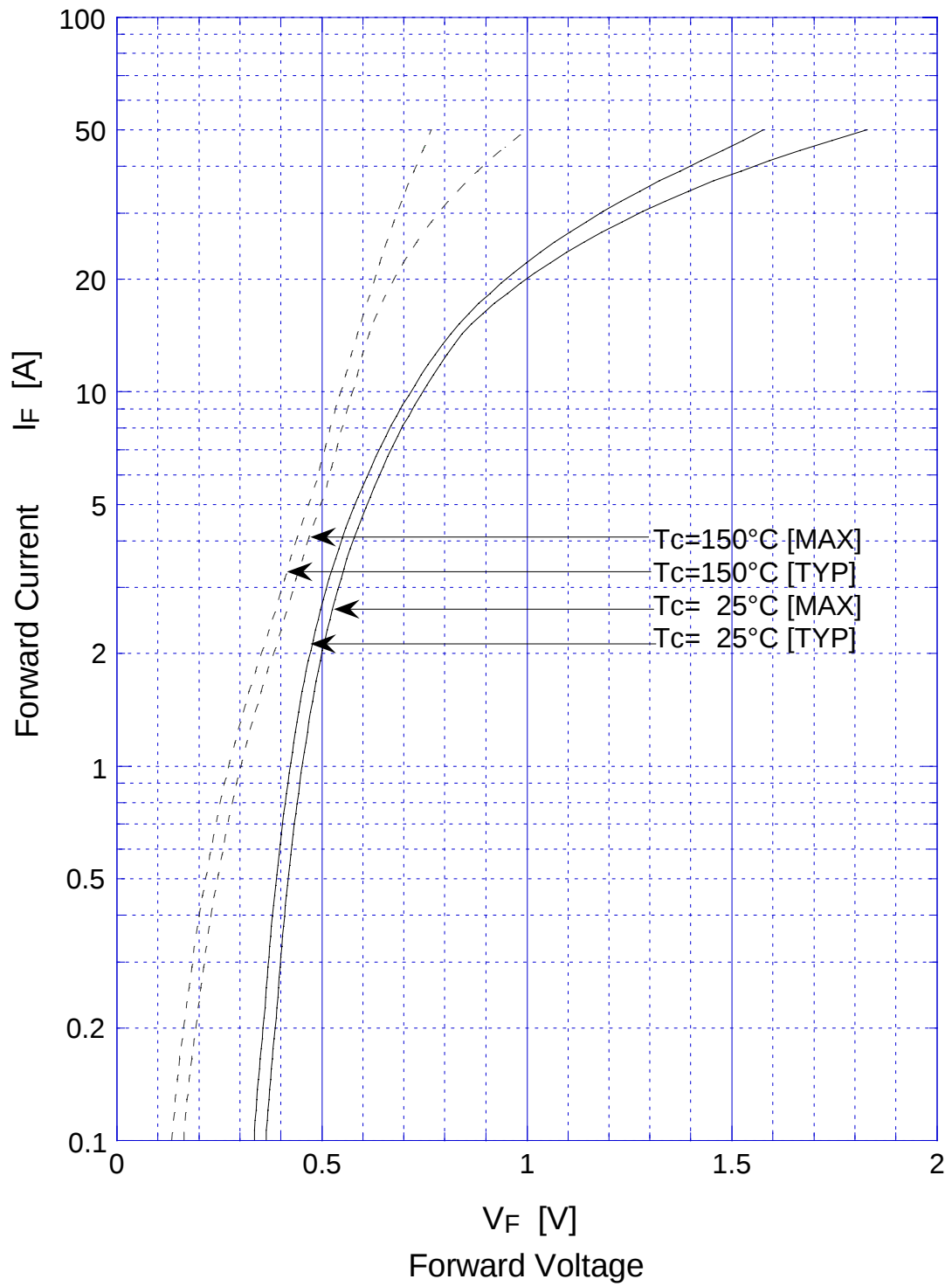
Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	V _F	IF=15A, Pulse measurement, Rating of per diode	Max 0.86	V
Reverse Current	I _R	V _R =V _{RM} , Pulse measurement, Rating of per diode	Max 1.0	mA
Junction Capacitance	C _j	f = 1MHz, V _R = 10V	TYP 390	pF
Thermal Resistance	θ _{jc}	junction to case	Max 1.3	°C/W

OUTLINE DIMENSIONS



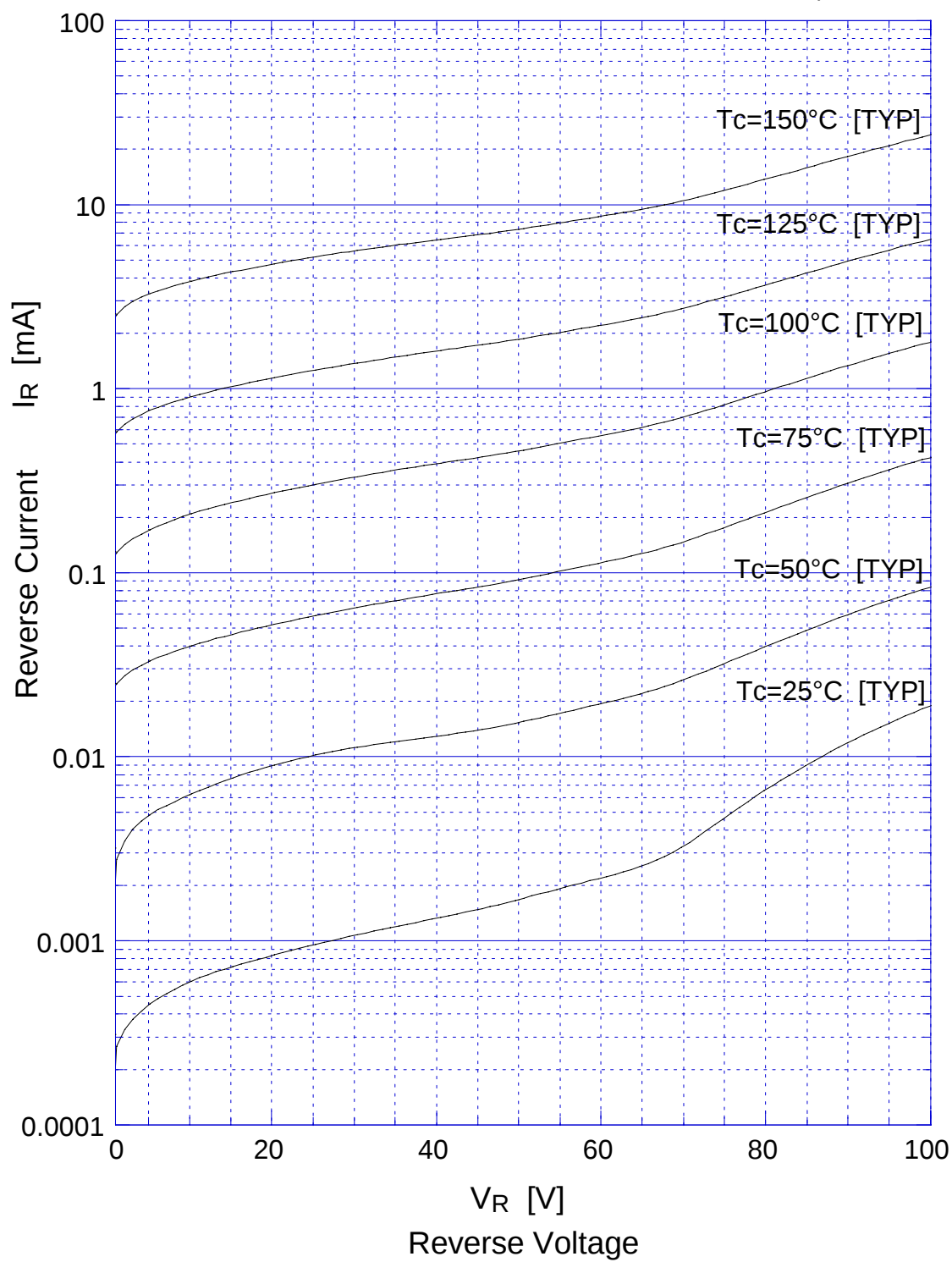
DF30JC10 Forward Voltage

Pulse measurement per diode

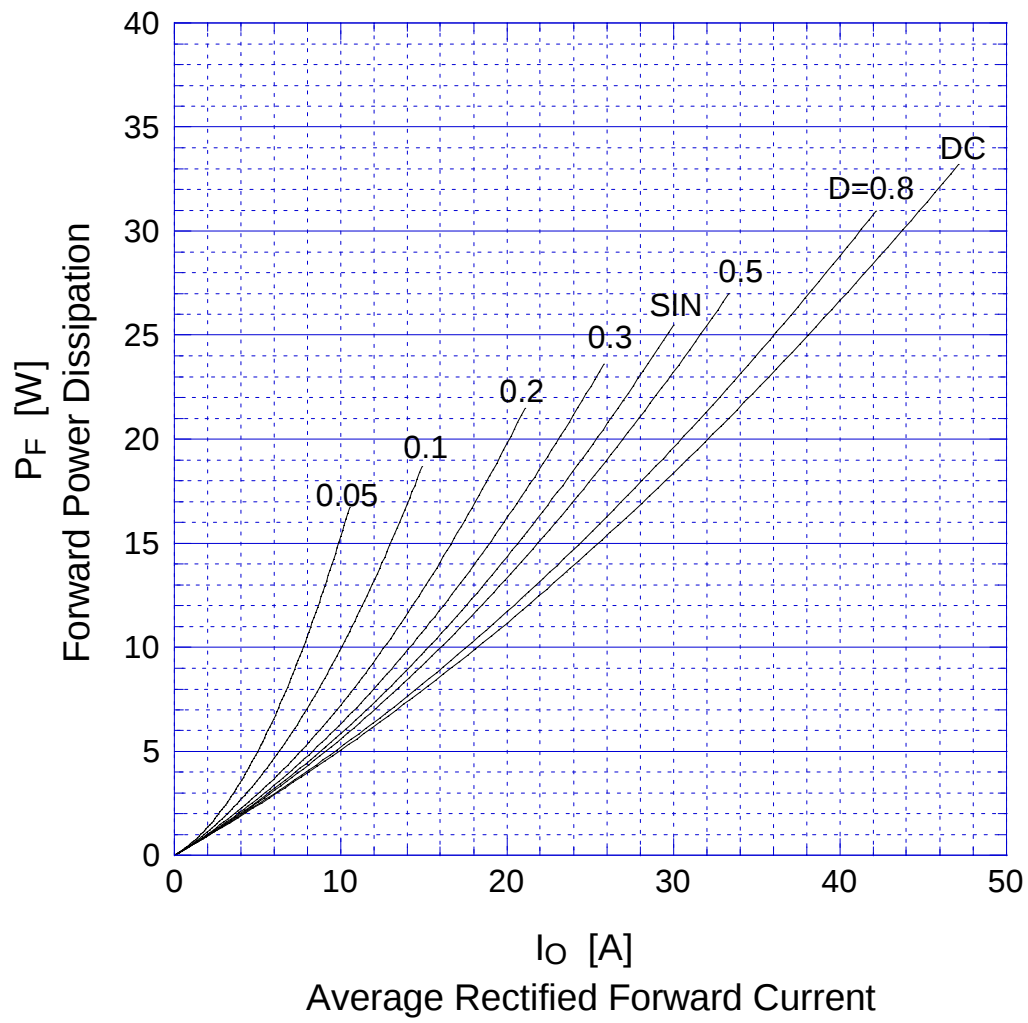


DF30JC10 Reverse Current

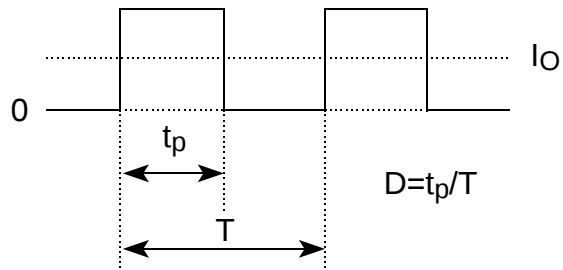
Pulse measurement per diode



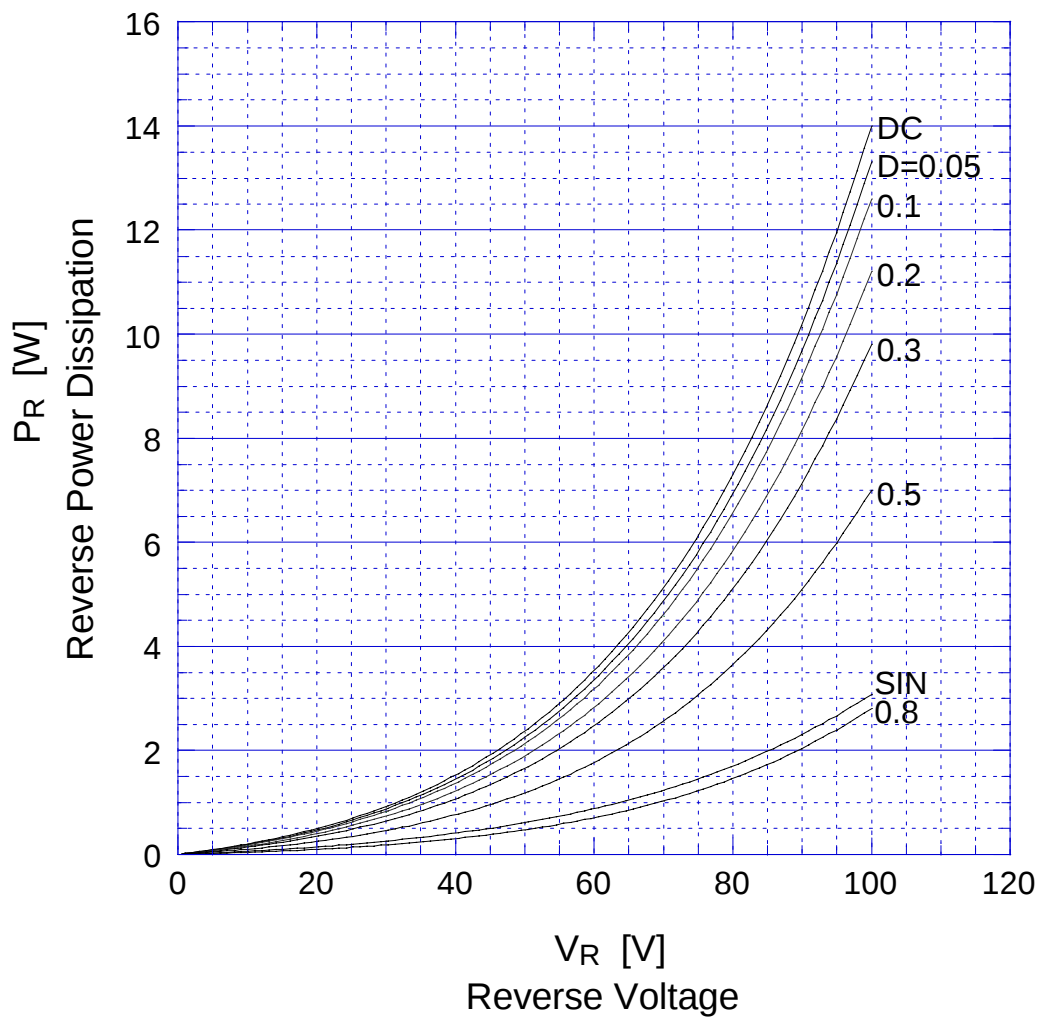
DF30JC10 Forward Power Dissipation



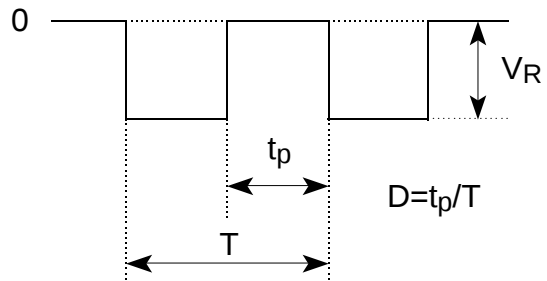
$T_j = 150^\circ\text{C}$



DF30JC10 Reverse Power Dissipation

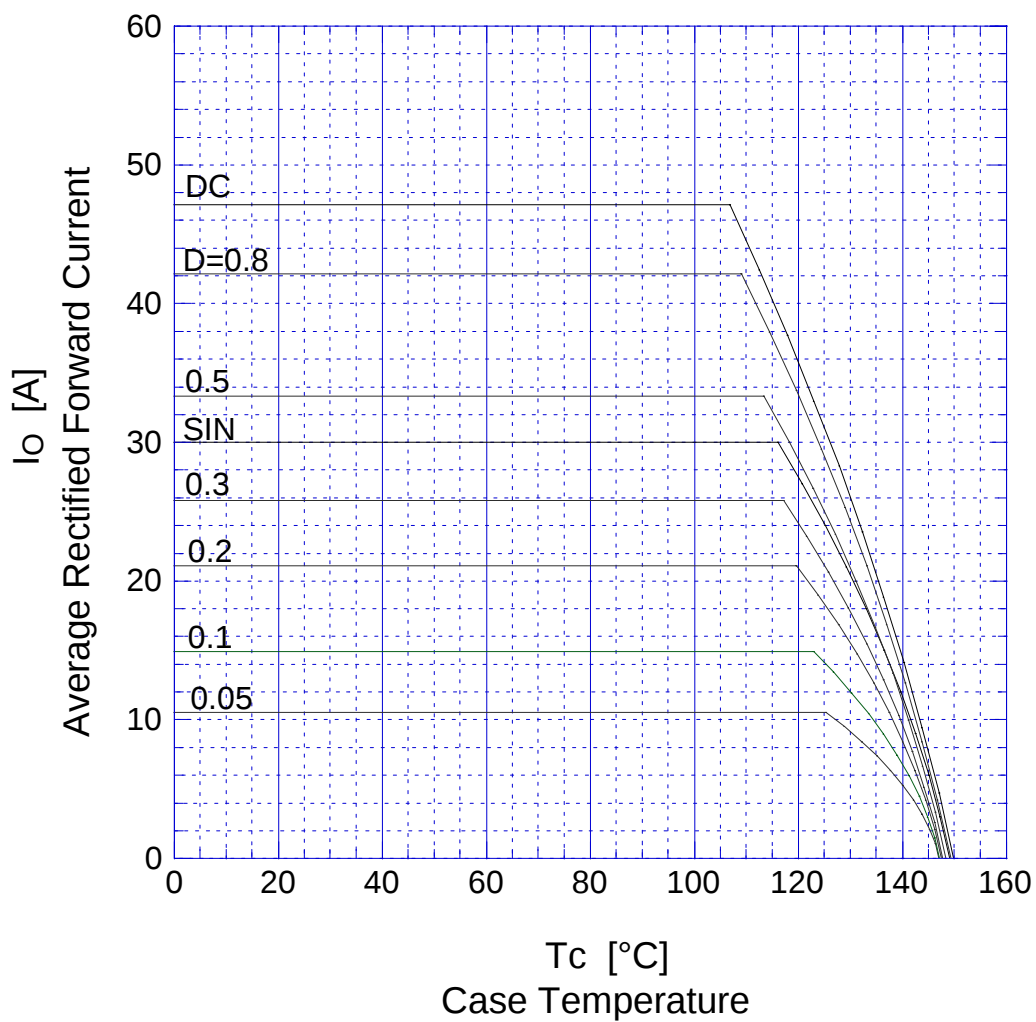


$T_j = 150^\circ\text{C}$

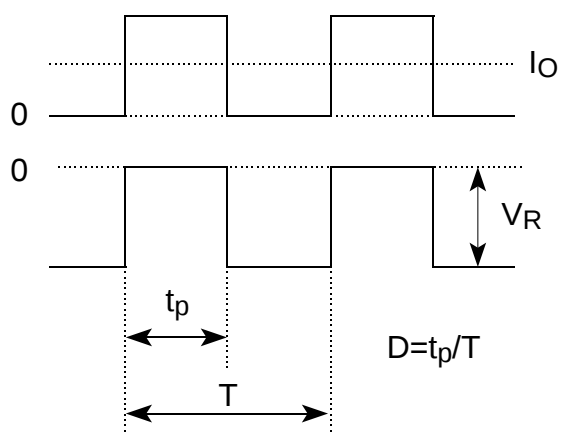


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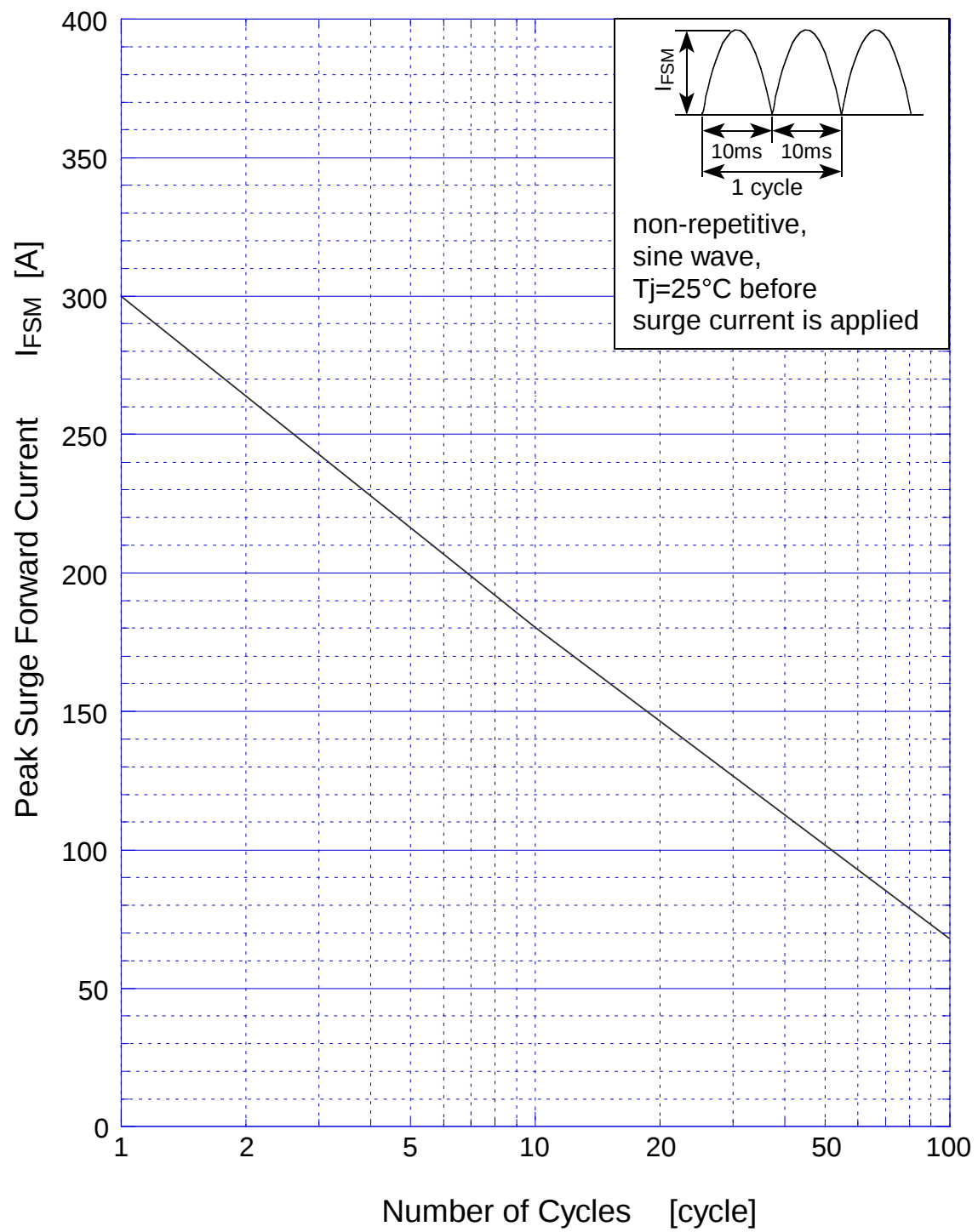
Derating Curve



$V_R = 50V$



DF30JC10 Peak Surge Forward Capability



DF30JC10 Junction Capacitance

