

DF20SC9M

90V 20A

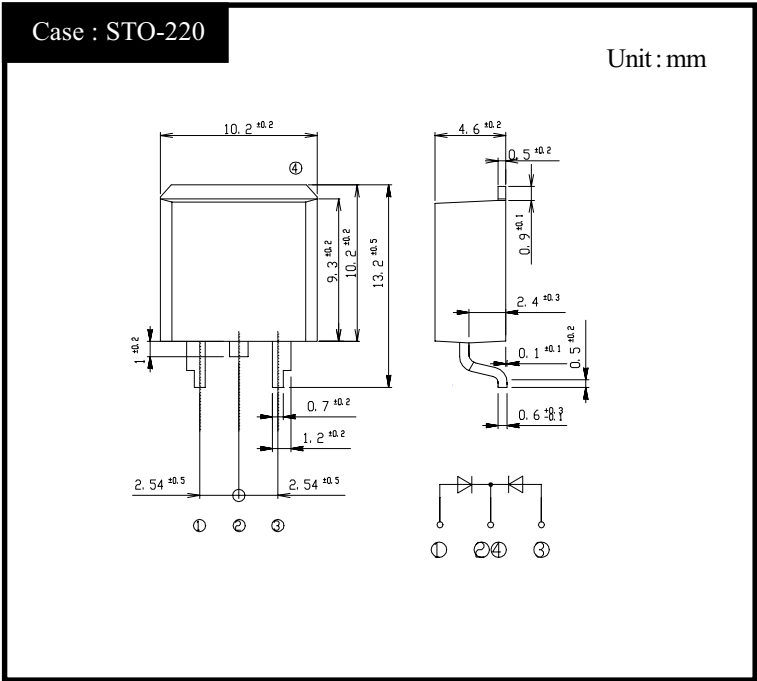
FEATURES

- SMT
- Tj150°C
- PRRSM avalanche guaranteed
- High current capacity with Small Package

APPLICATION

- Switching power supply
- DC/DC converter
- Home Appliances, Office Equipment
- Telecommunication

OUTLINE DIMENSIONS



RATINGS

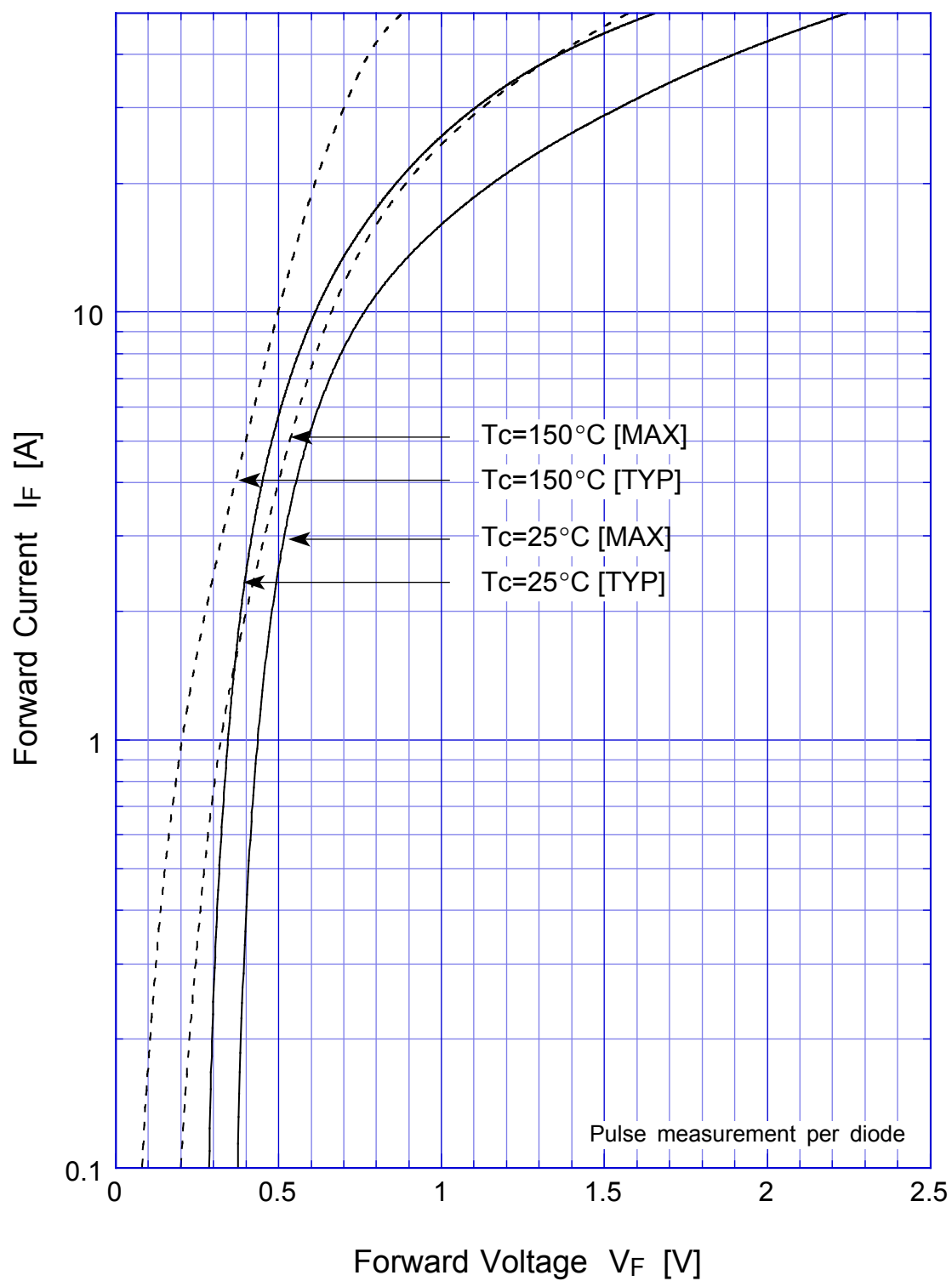
● Absolute Maximum Ratings (If not specified Tc=25°C)

Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	Tstg		-40~150	°C
Operating Junction Temperature	Tj		150	°C
Maximum Reverse Voltage	VRM		90	V
Repetitive Peak Surge Reverse Voltage	VRRSM	Pulse width 0.5ms, duty 1/40	100	V
Average Rectified Forward Current	IO	50Hz sine wave, R-load, Rating for each diode IO/2, Tc=111°C	20	A
Peak Surge Forward Current	IFSM	50Hz sine wave, Non-repetitive 1 cycle peak value, Tj=25 °C	200	A
Repetitive Peak Surge Reverse Power	PRRSM	Pulse width 10 μs, Rating of per diode, Tj=25°C	660	W

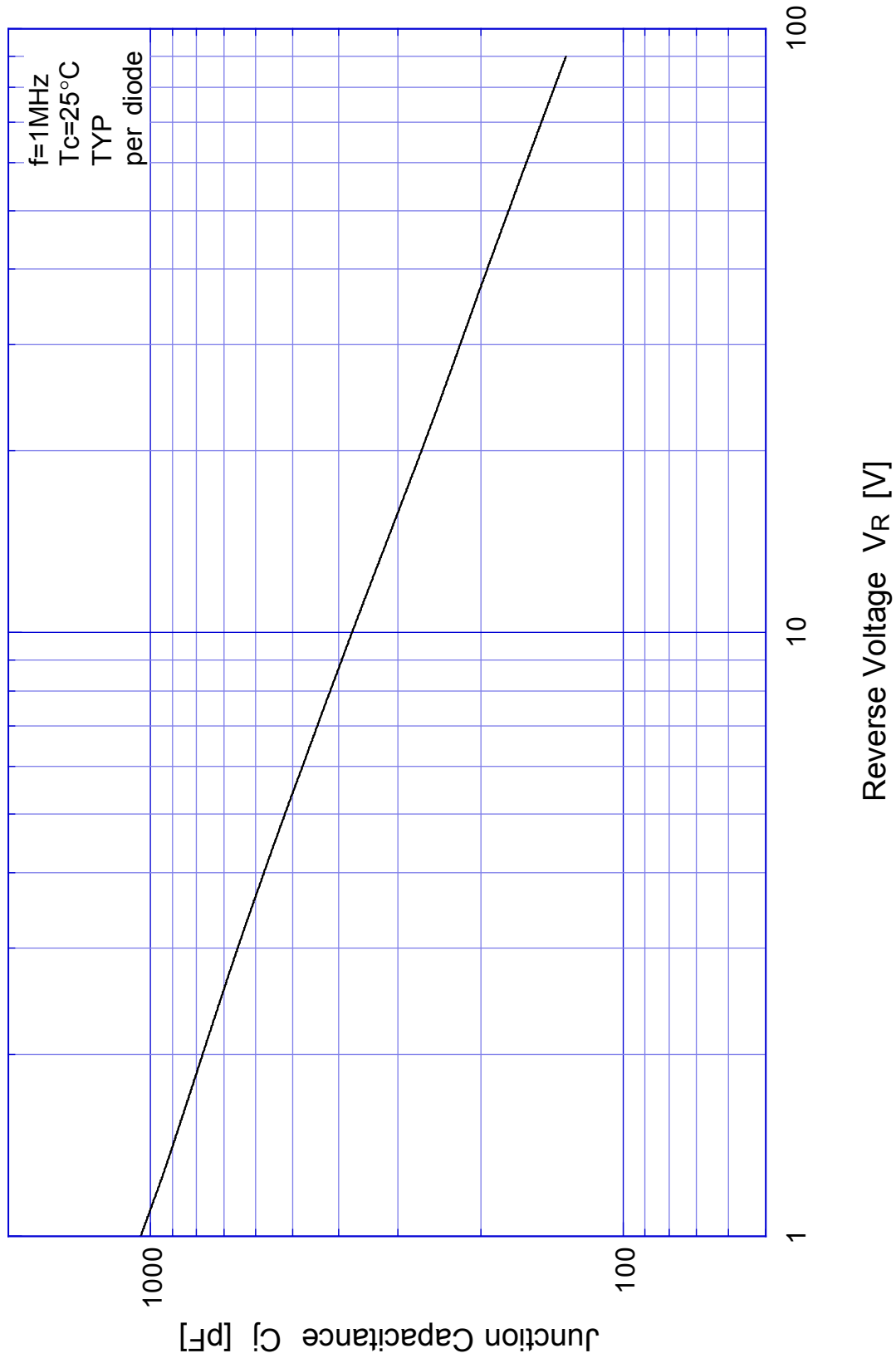
● Electrical Characteristics (If not specified Tc=25°C)

Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	VF	IF=10A, Pulse measurement, Rating of per diode	Max.0.75	V
Reverse Current	IR	VR=VRM, Pulse measurement, Rating of per diode	Max.10	mA
Junction Capacitance	Cj	f=1MHz, VR=10V, Rating of per diode	Typ.370	pF
Thermal Resistance	θjc	junction to case	Max.1.6	°C/W

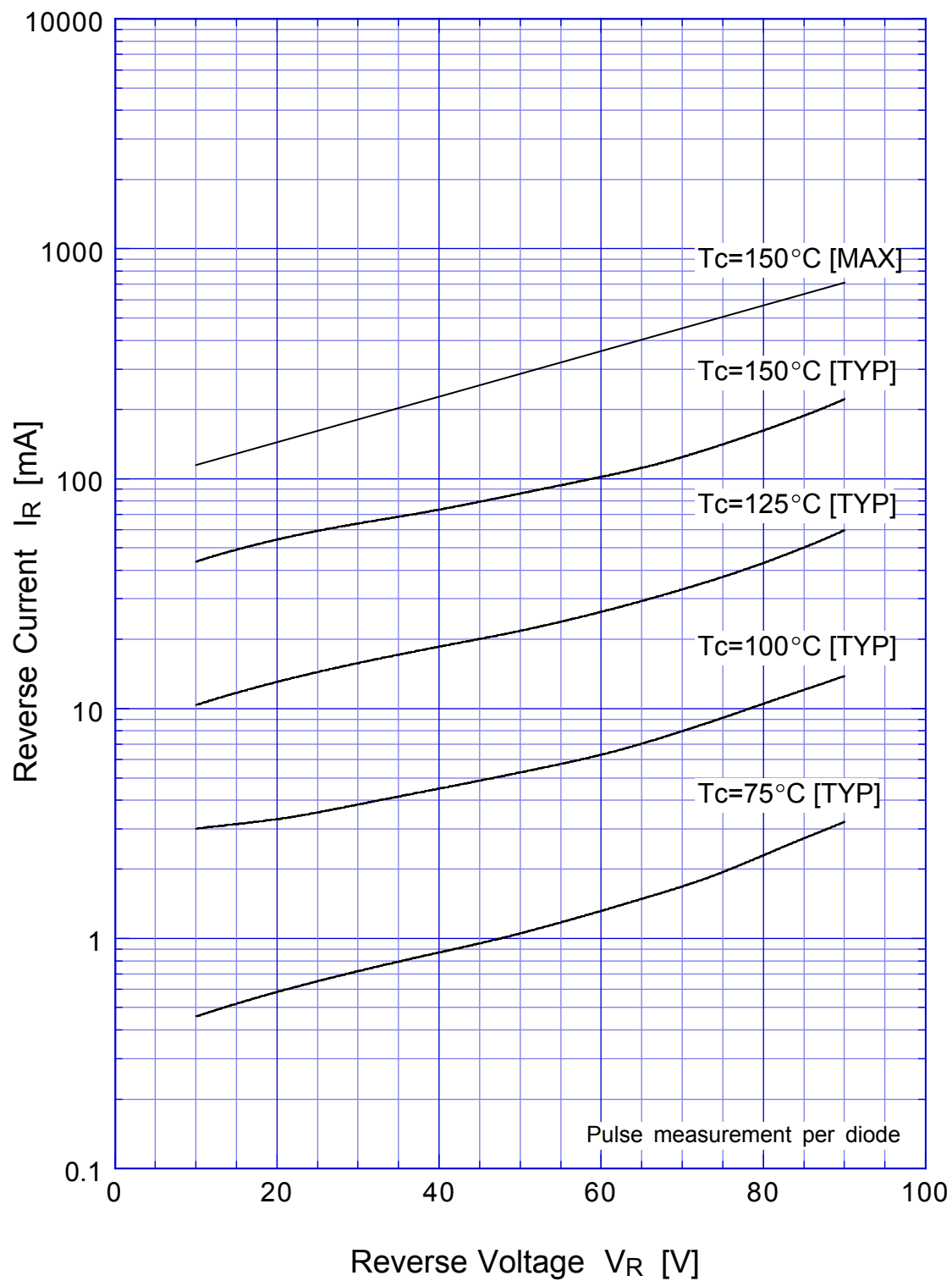
DF20SC9M Forward Voltage



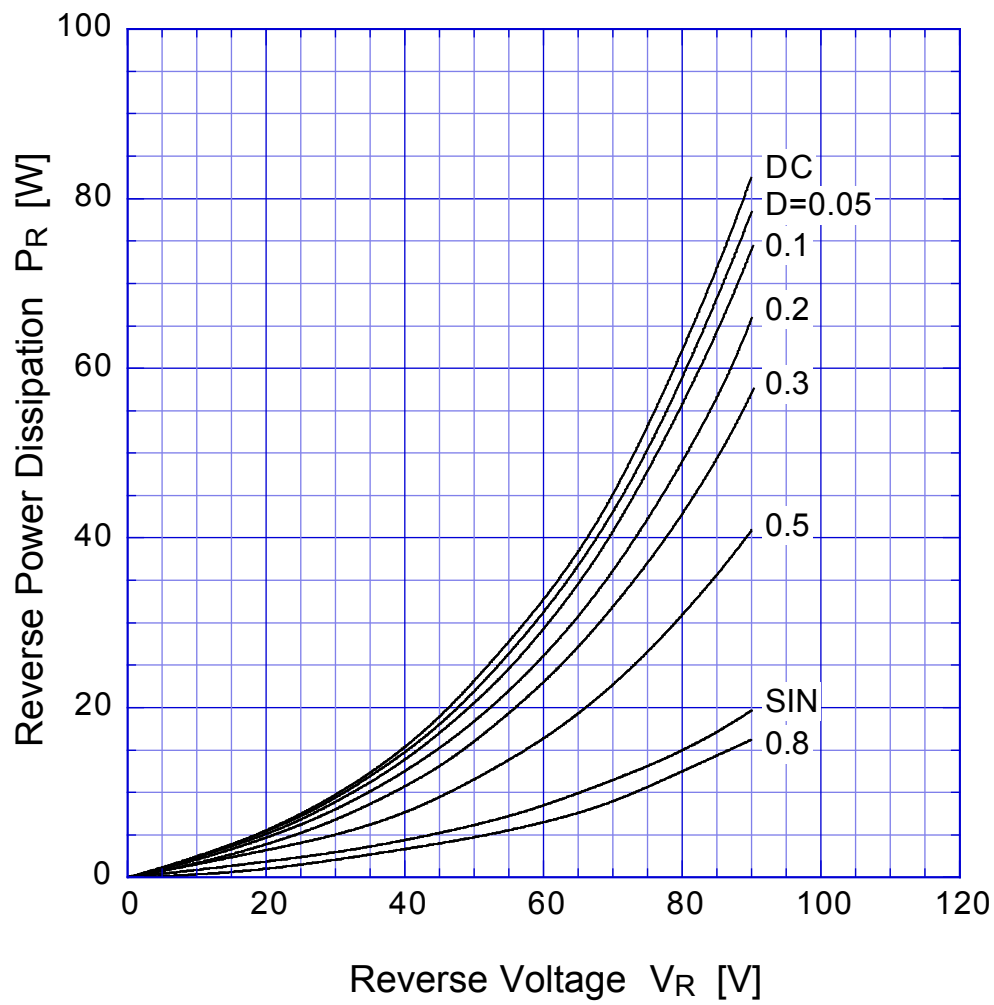
DF20SC9M Junction Capacitance



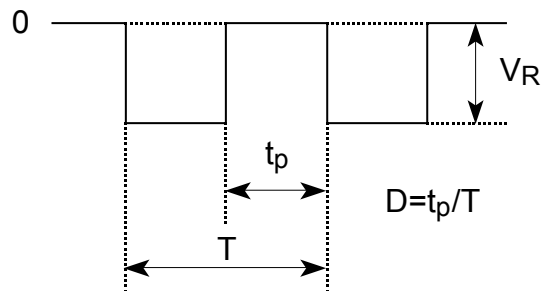
DF20SC9M Reverse Current



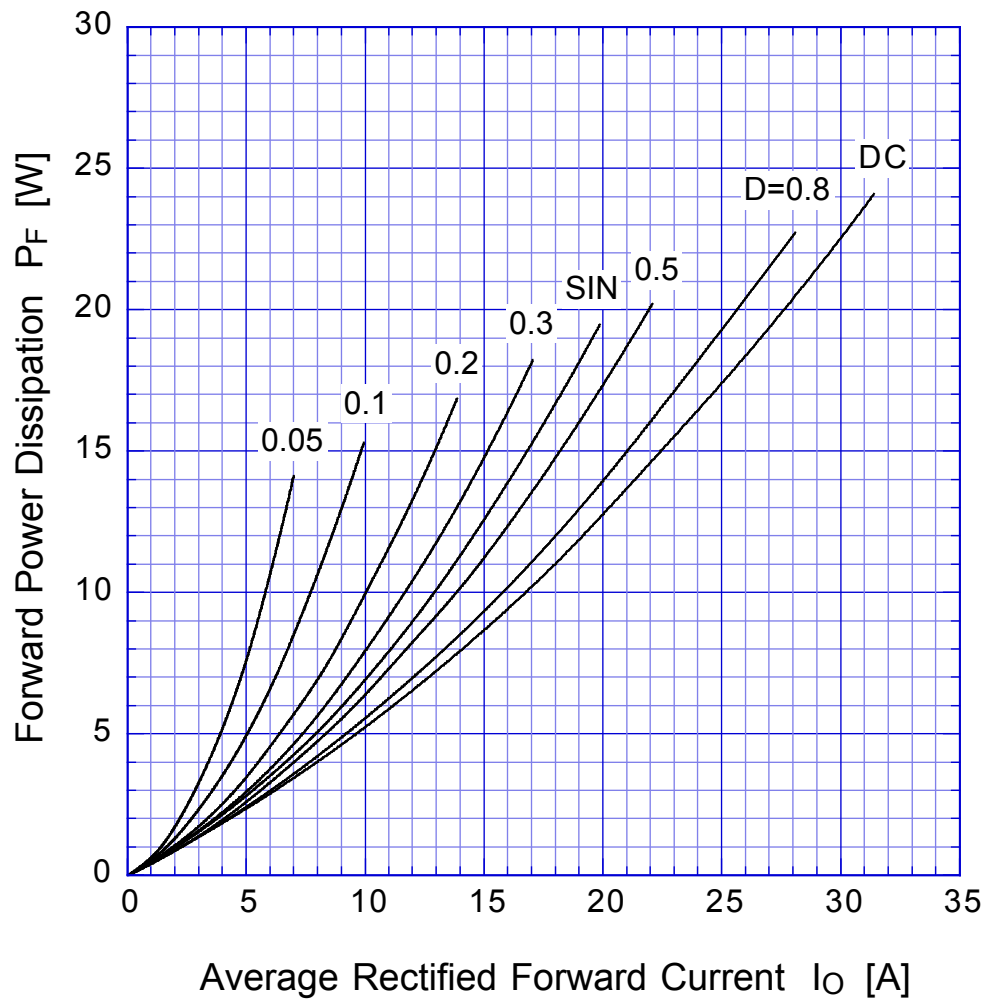
DF20SC9M Reverse Power Dissipation



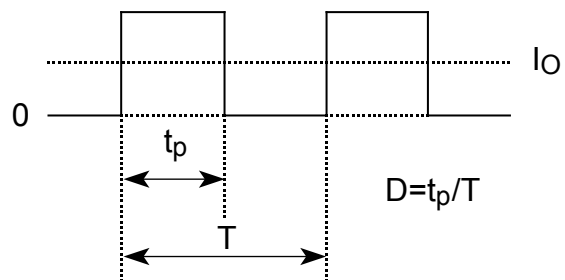
$T_j = 150^\circ\text{C}$



DF20SC9M Forward Power Dissipation

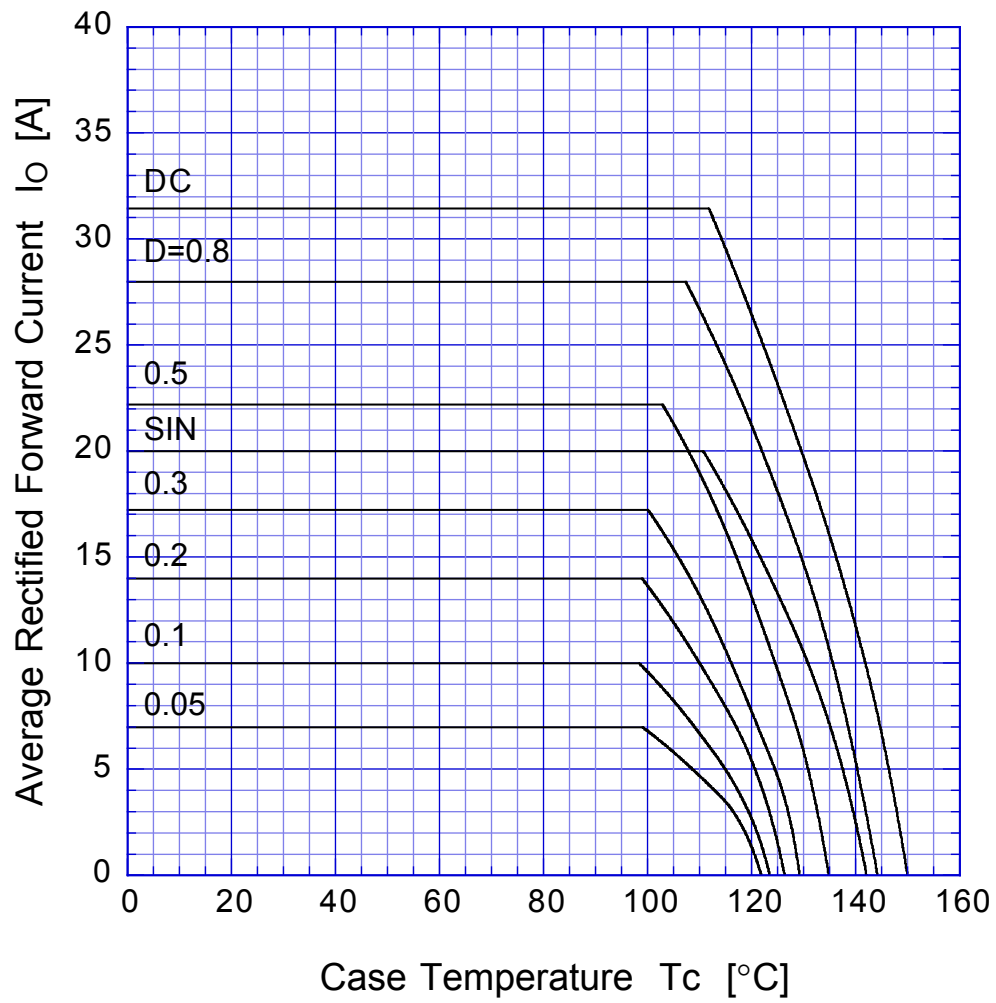


$T_j = 150^\circ\text{C}$

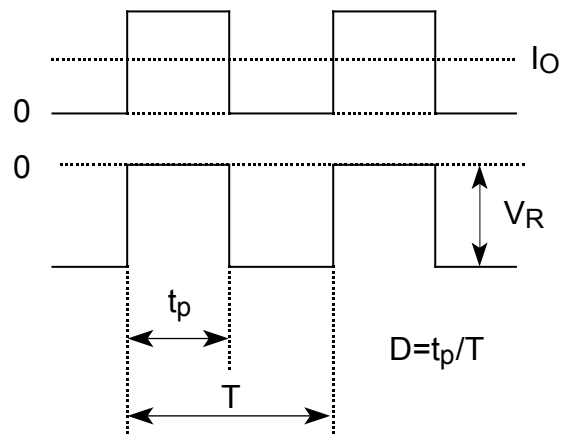


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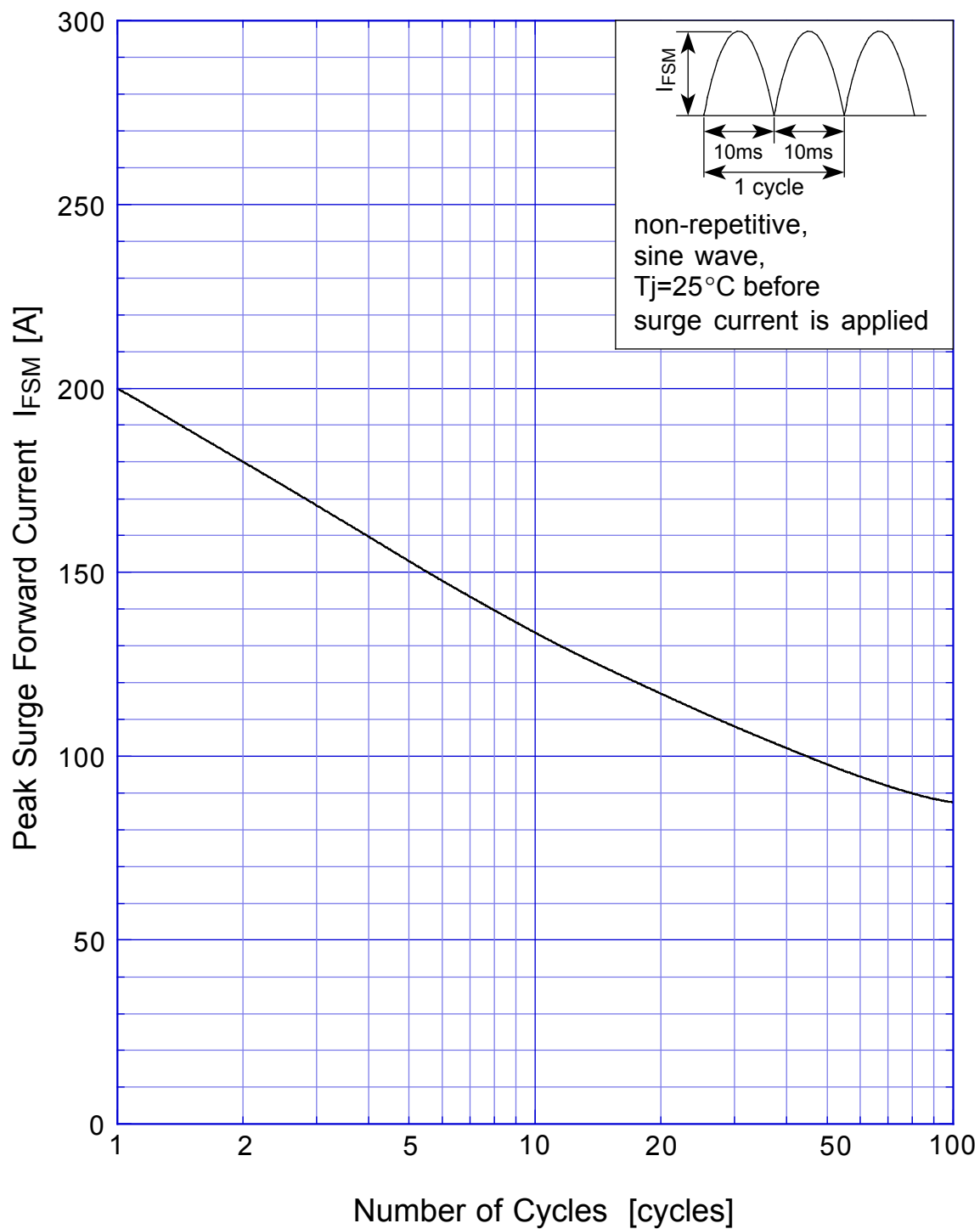
Derating Curve



$V_R = 45V$



DF20SC9M Peak Surge Forward Capability



SBD Repetitive Surge Reverse Power Derating Curve

